

**ANNUAL REPORT  
OF THE  
Department of Lands and Forests  
OF THE  
PROVINCE OF ALBERTA  
FOR THE  
Fiscal Year Ended March 31st  
1950**

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PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

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1951



To the Honourable J. J. Bowlen,  
*Lieutenant-Governor of the Province of Alberta.*

SIR:

I have the honour to submit the Report of the Department of Lands and Forests for the fiscal year ended March 31st, 1950.

I have the honour, to be, Sir,

Your obedient servant,

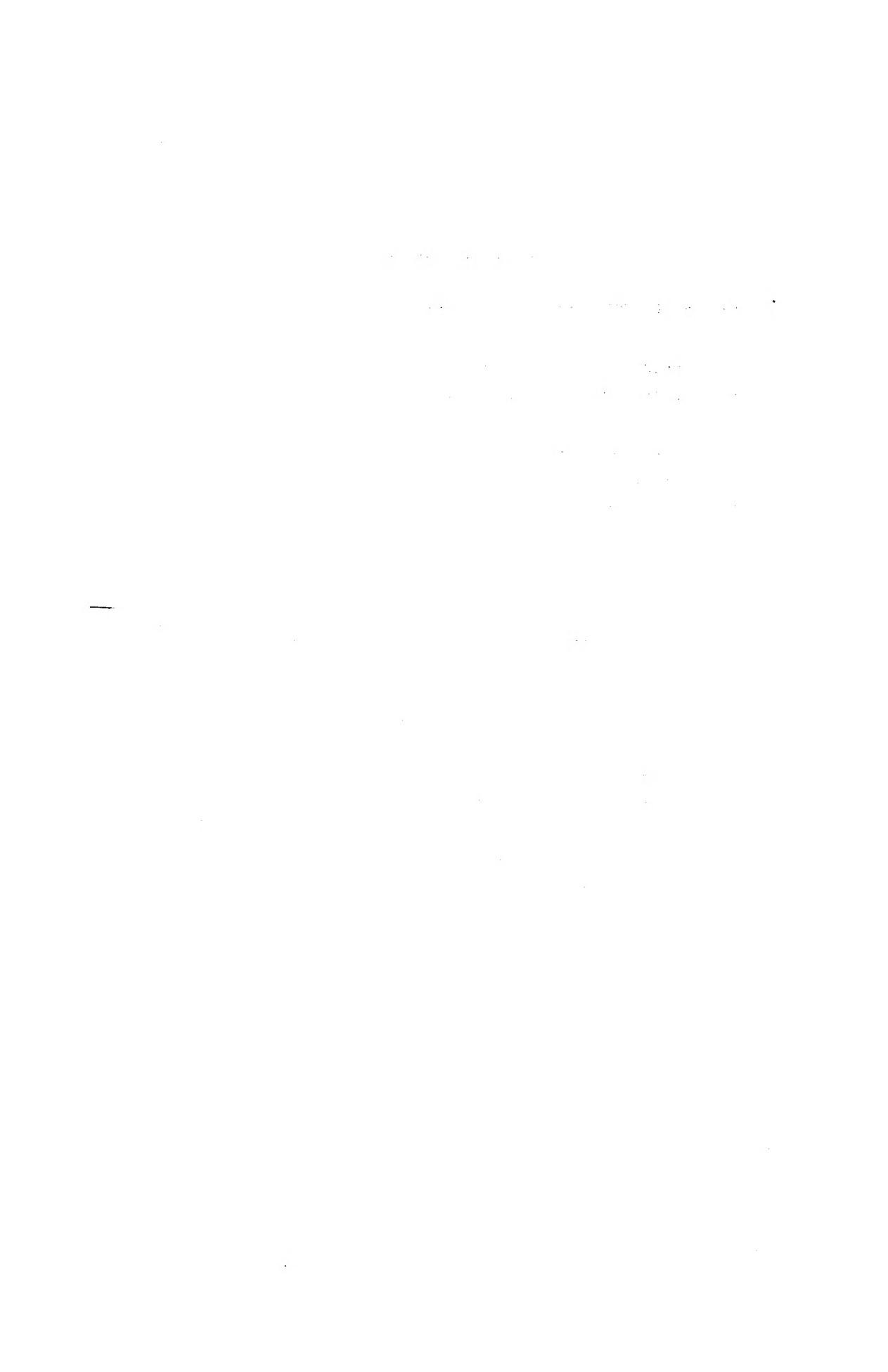
N. E. TANNER,  
*Minister of Lands and Mines.*

Edmonton, January 24, 1951.



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CHIEF OFFICERS  
DEPARTMENT OF LANDS AND FORESTS  
March 31st, 1950

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Honourable N. E. Tanner.....*Minister of Lands & Forests*  
John Harvie.....*Deputy Minister Lands & Forests*  
T. C. Rankine.....*Departmental Solicitor*  
V. A. Wood.....*Director of Lands*  
E. S. Huestis.....*Director of Forestry*  
J. L. Jansen.....*Chief Timber Inspector*  
A. Earnshaw.....*Radio Superintendent*  
D. Buck.....*Supt. Brazeau-Athabasca Forest Area*  
R. T. MacKey.....*Chief Ranger, Cypress Hills Forest Area*  
E. S. Huestis.....*Fish and Game Commissioner*  
D. E. Forsland.....*Superintendent of Game*  
H. B. Watkins.....*Superintendent of Fisheries*  
T. W. Dalkin.....*Director, Technical Division*  
A. McCallum.....*Administrative Accountant*  
C. B. Kenway.....*Registrar*  
Miss G. A. M. Matheson.....*Personnel Officer*  
Mrs. L. M. Brown.....*Stationery & Supplies*

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EASTERN ROCKIES FOREST CONSERVATION BOARD

Major General Howard Kennedy, C.B.E., M.C., B.Sc., Chairman  
James Wardle.....*Deputy Chairman*  
H. G. Jensen.....*Member*  
J. P. Alexander.....*Administrative & Liaison Officer*  
J. R. H. Hall.....*Supt. Clearwater Forest Reserve*  
F. G. Edgar.....*Supt. Bow River Forest Reserve*  
F. N. H. Lind.....*Supt. Crowsnest Forest Reserve*



**REPORT**  
OF THE  
**Department of Lands and Forests**

1949 - 1950

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HONOURABLE N. E. TANNER,  
*Minister of Lands and Forests*  
Edmonton.

Sir:

I have the honour to submit the first annual report of the Department of Lands and Forests for the fiscal year ending March 31st, 1950.

Respectfully submitted,

J. HARVIE,

*Deputy Minister.*

January 19th, 1951.

## Public and School Lands Administration

### REPORT OF THE DIRECTOR OF LANDS, V. A. WOOD

The Dominion and Provincial Governments continued the development work on the St. Mary and Milk River Development Project and it is expected that water will be available by the fall of 1950 for some of the lands located in this project. Mr. P. M. Sauder has been appointed Colonization Manager and will be responsible for the administration of this project until such time as irrigation districts are established.

The public lands, other than school lands and tax recovery lands, within this irrigation project which are selected by the Colonization Manager will be transferred to him for administration purposes. School lands will continue to be administered by this department and tax recovery lands will be transferred to the Department of Municipal Affairs. In the administration of public lands the Colonization Manager will comply with the "Announcement of Plans for Establishment of Veterans on Provincial Lands," made by the Minister September 17th, 1945 and which stated in part that "provincial lands within the irrigation project will be made available by sale at a nominal price of \$10.00 to veterans on the basis of a maximum of 160 acres to an applicant." Before obtaining notification a veteran will be required to complete various duties, including residence and cultivation.

An announcement was made in the press in October, 1949, that the Dominion Government had arranged to purchase the assets of the Canada Land and Irrigation Company for \$2,250,-000.00. It was stated that the Dominion Government intended to develop the irrigation project by bringing more lands under irrigation for the purpose of re-establishing settlers from the dried-out areas. Most of the lands to be brought under irrigation are at present situated in the Vauxhall Provincial Grazing Reserve and formerly belonged to the Canada Land and Irrigation Company, but were turned back for taxes by an agreement made on March 1, 1943, to the Department of Municipal Affairs, who subsequently transferred the lands to this department for administration purposes. Under this agreement the Canada Land and Irrigation Company was granted a period of ten years, to redeem part of the lands transferred to the department at a price of \$2.00 per acre.

At the present time the Canada Land and Irrigation Company is negotiating with the department to purchase part of the lands which were previously owned by the company. These lands will then be included in the assets of the company being purchased by the Dominion Government.

On December 21st, 1949, an agreement was entered into between the Government of the Province of Alberta, as represented by the Minister of Lands and Forests, and the Edmonton Pulp and Paper Mills Limited, granting the company the right

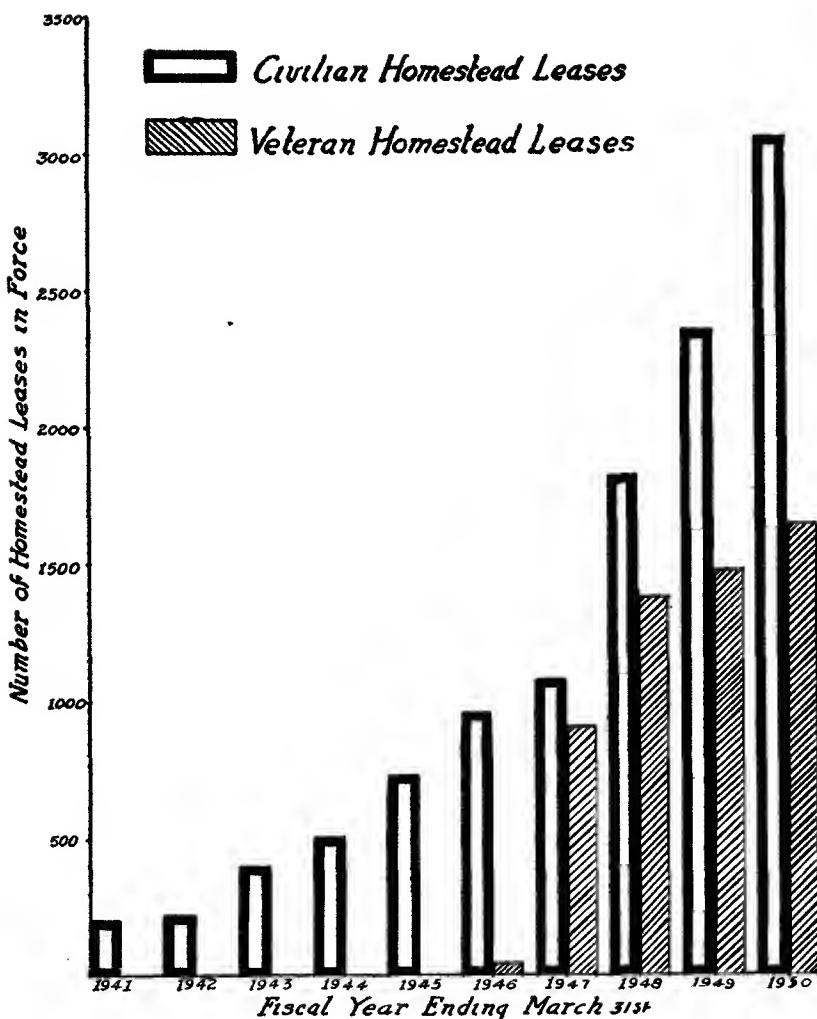
to cut and remove timber in certain areas of public lands for the purpose of manufacturing newsprint, paper and pulp. Approximately 128 townships have been reserved temporarily for pulp-wood purposes in connection with this enterprise.

During the fiscal year an additional fifty-seven veterans were settled on lands cleared and broken by contract under the Government clearing and breaking projects, in Townships 78 and 79, Ranges 2 and 3, West of the 6th Meridian. There is now a total of 111 half-section units under homestead lease in the clearing project in the Wanham, Belloy and Codesa areas, which will be farmed during 1950.

The veterans who commenced farming in 1949 in Township 78, Ranges 2 and 3, West of the 6th Meridian, had a fairly successful year.

P. Simonsen, one of the five contractors under the Government clearing and breaking project, has completed his contract. It is expected that K. F. Waters, Mix Brothers and Nick Johnson will complete their contracts in 1950 and that Lassiter's Limited will complete the balance of its contract in Township 77, Ranges 1 and 2; Township 78, Ranges 2 and 3, and Township 79, Range 2, West of the 6th Meridian, in 1951.

On March 25th, 1939, the granting of homesteads was discontinued and was replaced by the establishment of Agricultural Lease regulations. The first "Agricultural Lease," which is now called "Homestead Lease," was issued on September 1st, 1940. Since that time the number of leases in force has been increasing steadily as is shown on the accompanying diagram.



The increase in the total number of leases (veteran and civilian) in force for the fiscal year ending March 31st, 1950, is 802 as compared to an increase of 642 for the previous fiscal year ending March 31st, 1949. It is interesting to note that the increase in the number of civilian leases has been fairly steady during the last three years while, as would be expected, the increase in the number of veteran leases in force has been decreasing since 1947 and 1948 showing that most of the veterans have been re-established.

#### *Orders in Council*

As referred to in the last annual report for the fiscal year ending March 31st, 1949, the Department of Lands and Forests, which was formerly a part of the Department of Lands and Mines, was created on April 1, 1949, with the Honourable N. E. Tanner, as Minister, and Mr. John Harvie, as Deputy Minister.

The Public Lands Act which refers specifically to the administration of public lands, came into force on April 1st, 1949, and replaced The Provincial Lands Act which was repealed on March 31st, 1949, together with all regulations and orders in council pertaining to land administration established under The Provincial Lands Act.

Under The Public Lands Act, which contains regulations governing the issue of homestead, cultivation and grazing leases, it was necessary for administration purposes for the following orders in council to be passed. Only a few minor changes were made in the regulations and orders in council pertaining to land administration from those established under The Provincial Lands Act.

O.C. No. 490/49, May 2nd, 1949.

Regulations governing the issue of grazing permits on public lands.

O.C. No. 491/49, May 2nd, 1949

Regulations governing the issue of hay permits on public lands.

O.C. No. 492/49, May 2nd, 1949.

Regulations governing the issue of cultivation permits on public lands.

O.C. No. 493/49, May 2nd, 1949.

Regulations governing the issue of miscellaneous leases on public lands.

O.C. No. 494/49, May 2nd, 1949.

Regulations governing the leasing of accrued areas on public lands.

O.C. No. 495/49, May 2nd, 1949.

Regulations governing the issue of miscellaneous permits on public lands.

O.C. No. 496/49, May 2nd, 1949.

Restricting the acceptance of applications for Cultivation Leases and Homestead Leases to certified veterans under The Veterans' Land Act, 1942, of the Dominion of Canada and to persons who are residing and have been in continuous residence in the province for a period of two years prior to the date of making application.

O.C. No. 497/49, May 2nd, 1949.

Withdrawing certain lands from settlement, except for industrial or other such purposes as the Minister may in his discretion consider to be in the public interest, but shall not preclude any disposition pursuant to the provisions of The Forests Act.

O.C. No. 498/49, May 2nd, 1949.

Rental and taxes on grazing leases, outside the Special Areas, set at 10% of the forage value of the land.

O.C. No. 499/49, May 2nd, 1949.

Certain lands were opened for homestead leases.

O.C. 500/49, May 2nd, 1949.

Rates for crop shares on cultivated areas and yearly rentals for uncultivated areas established for the Province excluding the Special Areas.

O.C. No. 629/49, May 23rd, 1949.

Establishing "Schedule of Fees."

O.C. No. 818/49, July 9th, 1949.

Any lessee obtaining a homestead, which has been cleared or cultivated by funds provided through the Veterans' Land Act, and who pays for the cultivated area in cash or funds provided by the foregoing Act, shall pay the same rental as those who bring land under cultivation by their own efforts.

O.C. 164/50, February 20th, 1950.

Amends O.C. No. 497/49 and O.C. No. 499/49 by withdrawing from and adding to the settlement area lands open for homestead leases. Lands in townships 69 and 70, Range 19, West 5th Meridian were among those added to the area. From the interest shown in these two townships, it is expected that many applications for homesteads will be received for this area.

#### *Amendments to The Public Lands Act*

There were several amendments, pertaining to the administration of public lands, passed during the 1950 session of the legislature and contained in Chapter 53 of the Statutes of Alberta. The following are a few of the more important amendments.

Section 2, Clause (b) was deleted and a new Clause (tt) was added.

This change was necessary as the Peace River Land Agency Office was closed on March 31st, 1950. There is now only one public land agency office which is located in Edmonton.

#### Section 5, Subsection (2).

This subsection was added to clarify the position of the department regarding ownership of lands that comprise the shore or beds of streams, rivers and lakes.

#### Section 12, Clause (c).

This clause as originally worded was deleted in order that a person holding a Cultivation Lease may apply for a Homestead Lease.

#### Section 16, Subsection (2a).

This subsection was added in order that where moneys provided by the Government of Canada under The Veterans' Land Act, 1942, were expended on cultivation of land forming part of a Homestead Lease such cultivation may be considered an improvement.

#### Section 16a and Section 16b.

These are two new sections. Section 16a is similar to the former Section 17(1). Section 16b states that the crop share pay-

able by a homestead lessee on lands under cultivation at the time the lease is granted will be a one-fourth share for ten years instead of a one-third share for seven years.

**Section 17, Subsection (1b).**

This new subsection provides that where a lessee pays for land brought under cultivation with funds provided by the Government of Canada under The Veterans' Land Act, no rent shall be payable under Section 16b for such cultivation. As the lessee pays for the cultivation as an improvement it would be inequitable to require him to pay for it a second time by crop share under Section 16b.

**Section 17, Subsections (5) and (6).**

Subsection (5) grants the Minister the right, with the consent of the agricultural or homestead lessee, to rescind any existing lease and issue a new lease. Subsection (6) provides that the duties performed and rents paid under the rescinded lease shall count for the obtaining of notification under the new lease.

**Sections 29, 30, 31, 35 and 42.**

By the deletions of these sections it is no longer possible for a person, eligible for a homestead lease, to cancel out a homestead lessee not fulfilling his duties.

**Section 54, Subsections (2) and (3).**

These subsections provide that all Cultivation Leases and Cultivation and Grazing Leases now in existence will be extended to expire ten years after the thirty-first day of December following the date of issue of the lease.

**Section 55, Subsection (4).**

This subsection was added in order that the cash rent shall be payable in advance for all cultivation leases and cultivation and grazing leases on the 1st day of January in each year. The time of payment is thus extended to the end of the year to coincide with the term of the lease, as provided under the amendment to Section 54.

**Section 59, Subsection (1), Clause (b).**

The age requirement for an applicant for a grazing lease was changed from 21 years to 18 years.

**Section 63, Subsection (3).**

This new subsection provides that notwithstanding the provisions of any grazing lease, payment of the rental is now payable on or before February 1st in each year.

**Section 112, Subsection (1), Clause (a).**

The maximum area of land that may be granted for a school site was increased from 4 to 6 acres.

**Section 113, Clause (a), Sub-clause (x) and Clause (q).**

Clause (a), Sub-clause (x) provides that the Lieutenant Governor in Council is authorized to make regulations governing entry on public lands for geophysical and geological exploration.

Clause (q) authorizes the Minister to lease or transfer to Canada, lands required for use as an experimental station, or

purposes connected therewith, upon such terms and conditions as the Lieutenant Governor in Council may prescribe.

#### Section 148a.

This new section provides that no action shall lie against any person for anything done by him in the performance of duties assigned to him under The Public Lands Act.

#### *Grain Prices*

The years 1948 and 1949 as a whole represented a transition from the critical grain shortages of previous postwar years to years of good supply of cereal grains. Both bread grains and feed grains were in better supply and a generally easier situation prevailed. Bread rations have been lifted entirely in many countries and improved in others. Livestock industries in many countries are in a better position with increased supplies of feed grains.

The new International Wheat Agreement, 1949, provisionally signed by the delegates from 37 wheat importing countries and five wheat exporting countries, and finally ratified by the Governments of nineteen importing and three exporting countries for a term of four years starting with the 1949-50 crop is as follows:

Crop Year	Minimum Per Bushel	Maximum Per Bushel
1949-50 .....	\$1.50	\$1.80
1950-51 .....	1.40	1.80
1951-52 .....	1.30	1.80
1952-53 .....	1.20	1.80

On January 20, 1949, the Canadian and British Governments agreed upon a price of \$2.00 per bushel for the fifth and last year of the British Canadian Wheat Agreement, effective from August 1, 1949, to July 31, 1950.

The basic prices established by the Canadian Wheat Board for the 1949 crop year for No. 1 grades at Fort William were as follows:

Wheat .....	\$1.75 per bushel
Oats .....	0.65 per bushel
Barley .....	0.95 per bushel
Flax .....	2.50 per bushel

Rye was sold on the open market and flax was sold either on the open market or through the Canadian Wheat Board. The average open market price for rye was approximately \$1.20 per bushel and flax was somewhat higher than \$2.50 per bushel.

The Canadian Wheat Board announced that effective August 12th the delivery of wheat and oats would be ten bushels per acre at certain shipping points. There were no quotas on barley. All quotas were removed in Alberta on October 22nd.

In addition to crop share payments received, the following payments were received by the department as landlord on crop shares delivered prior to 1949.

Patronage Dividends (representing payments made by five elevator companies) .....	\$ 447.03
Final payment by Canadian Wheat Board on 1943 Producers' Certificates .....	891.03
Final payment by Canadian Wheat Board on 1944 Producers' Certificates .....	176.96
	<hr/>
	\$1,515.02

On April 1st, 1949, the initial price for wheat was increased by the Canadian Wheat Board from \$1.55 per bushel to \$1.75 per bushel, for No. 1 grade at Fort William. The Canadian Wheat Board also announced at the same time that an adjustment payment of approximately 20c per bushel would be payable on all wheat marketed through the Wheat Board from August 1, 1945, to April 1, 1949.

For the crop years 1945 to 1948, inclusive, the total adjustments declared payable up to March 31, 1950, by the Canadian Wheat Board for crop shares delivered direct to the elevator in the name of the department and for crop shares payable by the lessee where cash settlement for the crop share was made on the initial price basis, \*are made up as follows:

1945 .....	.99c	wheat adjustment	\$ 3,098.78
1945 .....	19.8c	wheat adjustment 1st	16,046.86
1945 .....	19.8c	wheat adjustment 2nd	15,886.20
1946 .....	19.8c	wheat adjustment 1st	32,250.53
1946 .....	19.8c	wheat adjustment 2nd	31,495.49
1946 .....	3.623c	oats adjustment	4,494.81
1946 .....	10c	barley adjustment	2,538.81
1947 .....	19.8c	wheat adjustment 1st	26,929.00
1947 .....	19.8c	wheat adjustment 2nd	28,504.93
1947 .....	5c	oats adjustment	516.10
1947 .....	11c	barley adjustment	498.95
1947 .....	5.881c	oats adjustment	6,248.28
1947 .....	6.780c	barley adjustment	3,899.43
1948 .....	19.8c	wheat adjustment	31,642.61
<b>Total .....</b>			<b>\$204,050.78</b>

The standing of the above account as of March 31, 1950, is as follows:

Amount collected prior to April 1st, 1949 .....	88,311.91
Amount collected from the Canadian Wheat Board between April 1, 1949 and March 31, 1950 .....	80,782.39
Amount collected from the lessees between April 1, 1949 and March 31, 1950 .....	30,218.21
Balance to be collected from the lessees .....	4,788.27
<b>Total .....</b>	<b>\$204,050.78</b>

Seeding commenced in southern Alberta April 10th and was general throughout the province from April 25th to 30th. Seeding was practically completed in Alberta, except for a small percentage of coarse grains, by June 14th. Harvesting was practically completed by October 10th in excellent harvesting weather.

The average crop yields for the province for 1949 were as follows:

Wheat .....	12.7 bushels per acre
Oats .....	24.4 bushels per acre
Barley .....	18.9 bushels per acre
Rye .....	8.5 bushels per acre
Flax .....	8.4 bushels per acre

Crop yields in 1949 were much lower than last year but crop share collections have been very satisfactory and there are comparatively few unsettled accounts.

#### Sales of Land

During the fiscal year a total of 1,056 parcels of school and public lands, including 115 lots, were offered for sale by public

\* All lessees making a cash settlement for the crop share payable on the initial price basis were billed for any adjustment payments declared by the Canadian Wheat Board subsequent to the crop share settlement.

auction throughout the province. This is by far the largest number offered for sale in any year since the transfer of the resources to the province in 1930. Of the above, 315 parcels and 35 lots were public lands, and of this amount 200 parcels and 5 lots were sold.\*

It is not the policy to offer for sale lands located in the area of the province reserved from settlement; or to offer public lands, other than tax recovery or school lands, which are located in the homestead lease area and have sufficient acreage suitable for cultivation to meet the requirements of the Homestead Lease regulations.

In many cases sales were held in very inclement weather but as a whole the sales were well attended and bidding keen. The highest purchase price received for a parcel of public land was \$43.50 per acre. The attendance at the sales and prices received indicate that the farmers are generally prosperous and eager to acquire more land.

#### *Agencies and Sub-Agencies*

The Peace River Public Land Office, in operation since the transfer of the resources in 1930, was officially closed March 31, 1950. Mr. R. Cruickshank, the Agent of Public Lands, Peace River, who was also the Agent of Dominion Lands when the province took over the resources from the Dominion of Canada in 1930, is retiring from the service. A sub-agency office will be opened in Peace River, April 1, 1950, with Mr. H. A. Brick in charge and Miss Kelley, Acting Sub-Agent.

When the Provincial Lands Act came into force in 1930 there were five Provincial Land Agencies located at Lethbridge, Calgary, Edmonton, Peace River and Grande Prairie. The agents were responsible to the Directors of Lands, for the administration, management, sale or settlement of lands within their districts. However, as the districts became settled the need for the agency offices has diminished and sub-agency offices have been found satisfactory. With the closing of the Peace River Agency office all agency offices have now been closed except the Edmonton office. The administration, management, sale and settlement of public and school land is now entirely centralized under the Director of Lands, Edmonton.

The closing of the agency office and establishment of a sub-agency abolishes the necessity of keeping duplicate records in the agency office and head office and reduces considerably the overall number of staff required in the Lands Division with little or no inconvenience to the general public. It is believed that the general public can receive better service at much less expense through the services of the travelling sub-agent than that given by an agency office. In this connection Mr. H. A. Brick, Sub-Agent at Peace River, will hold temporary sub-agencies for one or two days, periodically, during 1950 at the following places: High Prairie, Falher, Manning, Hines Creek, Spirit River, Cherry Point and Fort Vermilion.

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\* Further statistics regarding school land sales will be found under the "School Land Section" of the report.

During the fiscal year sub-agencies were maintained and will continue to be maintained, except at Hines Creek which was closed on March 31, 1950, at Athabasca, Bonnyville, Grande Prairie, Lac La Biche, Rocky Mountain House and an office of information in Calgary.

### *Inspections*

The inspection work was again carried out by seven permanent inspectors. Five agricultural students from the University of Alberta were employed temporarily during the summer months.

When weather conditions prevented further land inspection work the permanent inspectors assisted in preparing the lists of lands to be offered for sale and conducted the auction sales of school and public lands throughout the Province. This arrangement proved satisfactory.

The following is a summary of field inspections:

#### SOIL SURVEY

Requests outstanding at April 1, 1949 .....	476
Requests called during fiscal year .....	1,304
Reports received during fiscal year .....	1,199
Requests outstanding at March 31, 1950 .....	581

#### GENERAL, GRAZING AND SCHOOL LANDS

Requests outstanding at April 1, 1949 .....	1,043
Requests called during fiscal year .....	2,790
Reports received during fiscal year .....	2,465
Requests outstanding at March 31, 1950 .....	1,368

The number of requests for reports and inspection reports received does not represent the number of parcels of land inspected as in most cases several quarter sections are included in a request for a report.

A considerable number of the requests outstanding accumulated during the winter and spring months when the inspectors were not in the field.

### *Collections*

The Inspector of Collections was in the field from early spring until late in December. The inspection work included a few weeks in the Peace River district where settlements were made for a number of old accounts. Later in the winter the inspector assisted in conducting auction sales of land.

Approximately six hundred inspections were made including two hundred inspections in connection with renewal applications for Cultivation Leases. The sum of \$48,564.98 was collected and quite a percentage of this was on past due accounts.

The following is a summary of other business transacted:

#### ACCRUED AREA LEASES

	Number	Area in Acres
Leases in force at April 1, 1949 .....	618	41,788.94
Leases issued during fiscal year .....	130	7,081.82
Leases cancelled during fiscal year .....	86	5,330.59
Leases in force at March 31, 1950 .....	662	48,539.67

#### HOMESTEAD LEASES—CIVILIAN

Leases in force at April 1, 1949 .....	2,333	482,210.85
Leases issued during fiscal year .....	992	228,044.41
Leases cancelled during fiscal year .....	252	54,040.60
Leases patented during fiscal year .....	72	13,835.66
Leases in force at March 31, 1950 .....	3,001	642,379.00



Location: Tp. 82, Rge. 11, W. 6th Mer. Severe burn—recent fire. Fairly good clay soil.



Location: Tp. 82, Rge. 10, W. 6th Mer. Semi open, due to successive burning. Clay loam soil. Mostly fairly good agricultural land.



Location: Tp. 83, Rge. 7, W. 6th Mer. Stand of young growth lodge pole pine. The original timber was all burned in 1938. This is good timber for the future, if protected.

**HOMESTEAD LEASES—VETERAN**

	Number	Area in Acres
Leases in force at April 1, 1949 .....	1,473	388,342.67
Leases issued during fiscal year .....	252	71,146.99
Leases cancelled during fiscal year .....	100	24,685.73
Leases in force at March 31, 1950 .....	1,625	434,803.93

**LICENSES OF OCCUPATION**

Licenses in force at April 1, 1949 .....	164	3,808.43
Licenses issued during fiscal year .....	10	471.37
Licenses cancelled during fiscal year .....	6	139.49
Licenses in force at March 31, 1950 .....	168	4,140.31

**MISCELLANEOUS LEASES**

Leases in force at April 1, 1949 .....	173	10,640.68
Leases issued during fiscal year .....	18	464.49
Leases cancelled during fiscal year .....	15	367.38
Leases in force at March 31, 1950 .....	176	10,737.79

**TOWNSITE LEASES**

Leases in force at April 1, 1949 .....	8	
Leases issued during fiscal year .....	0	
Leases cancelled during fiscal year .....	0	
Leases transferred to Provincial Parks Board .....	7	
Leases in force at March 31, 1950 .....	1	

**MINERAL SURFACE LEASES**

Leases in force at April 1, 1949 .....	13	17,627.41
Leases issued during fiscal year .....	0	0
Leases cancelled during fiscal year .....	1	16.07
Leases in force at March 31, 1950 .....	12	17,611.34

**FUR FARM LEASES**

Leases in force at April 1, 1949 .....	10	1,343.90
Leases issued during fiscal year .....	0	0
Leases cancelled during fiscal year .....	4	327.30
Leases in force at March 31, 1950 .....	6	1,016.60

**\*CULTIVATION LEASES**

Leases in force at April 1, 1949 .....	521	93,911.80
Leases issued during fiscal year .....	122	20,802.96
Leases cancelled during fiscal year .....	80	13,794.08
Leases in force at March 31, 1950 .....	563	100,920.68

**PUBLIC LAND SALES**

Sales in force at April 1, 1949 .....	254	16,637.66
Sales granted during fiscal year .....	269	32,618.66
Sales cancelled during fiscal year .....	0	0
Sales adjusted (by withdrawal of area) .....	0	1.91
Sales patented during fiscal year .....	81	4,995.22
Sales in force at March 31, 1950 .....	442	44,259.19

**RIGHTS OF ENTRY**

Rights of Entry in force at April 1, 1949 .....	85	
Applications received .....	50	
Rights of Entry cancelled .....	16	
Rights of entry granted .....	61	
Applications pending .....	33	
Rights of Entry in force at March 31, 1950 .....	132	

**CANCELLATIONS**

Homesteads and Soldier Grants .....	21	
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**NOTIFICATIONS FOR TITLE (HOMESTEADS)**

Applications on hand at April 1, 1949 .....	151	
Applications received .....	46	
Notifications for title issued during fiscal year .....	99	
Applications on hand (checked and waiting completion) .....	92	
Applications on hand April 1, 1950 .....	6	
Unpatented homesteads .....	113	

MISCELLANEOUS SQUATTERS PERMITS	467	
issued during fiscal year .....		
MISCELLANEOUS PERMITS FOR BUILDING SITES ON TRAP LINES issued during fiscal year .....	147	

\* Under The Provincial Lands Act these leases were called "Cultivation and Grazing Leases." The Public Lands Act changed the name to "Cultivation Leases." In the previous annual report Cultivation and Grazing Leases issued for a term of twenty-one years and ten years were shown separately. As there were only seven leases issued for a term of twenty-one years in force on April 1, 1949, they have now all been included under the heading "Cultivation Leases."

GRAZING PERMITS issued .....	2,333	453,291.57
CULTIVATION PERMITS issued .....	117	2,418.61
HAY PERMITS issued .....	1,781	
Total number of tons, 15,196		
HAY SEIZURES .....	Nil	
ASSIGNMENTS REGISTERED (leases, permits and sales) .....	219	

#### ROAD ALLOWANCE LEASES

In accordance with Order in Council numbered O.C. 118/49 dated January 31, 1949, this department was granted authority by the Department of Public Works to lease road allowances in the southern part of the Province. During the fiscal year 113 Road Allowance Leases were issued and all lease and permit holders of public lands are being communicated with to ascertain what road ways are being used by them for grazing or other purposes.

	Number	Area in Acres
Leases in force at April 1, 1949 .....	Nil	.....
Leases Issued .....	113	2,222.82
Leases cancelled .....	1	4.00
Decrease by withdrawal .....		.97
Total number and area of existing leases .....	112	2,217.85

#### GRAZING

The average price for all grades of cattle sold on the Calgary market from July 1 to December 31, 1949, inclusive, was 16.03c per pound as compared with 16.57c per pound for the same period in 1948.



Overgrazing, or improper use of grazing land. Note the stones on the surface and the extreme lack of grass.

In view of the decrease in prices, retail and taxes for the period January 1, 1950, to December 31, 1950, on grazing leases and for the period April 1, 1950, to March 31, 1951, on grazing permits, was lowered as follows:

	1949	1950
1 head to 24 acres .....	$17\frac{1}{4}$ c per acre	$16\frac{3}{4}$ c per acre
1 head to 32 acres .....	$13\frac{1}{2}$ c per acre	$12\frac{1}{2}$ c per acre
1 head to 40 acres .....	$10\frac{1}{4}$ c per acre	$10\frac{1}{2}$ c per acre
1 head to 50 acres .....	$8\frac{1}{4}$ c per acre	8c per acre

The grazing rental on head tax basis for 1950 is as follows:

SUMMER GRAZING—

Horses .....	$\$1.20$ per head per month
Cattle .....	$1.00$ per head per month
Sheep .....	$.10$ per head per month

WINTER GRAZING—

Horses .....	$\$1.00$ per head per month
Cattle .....	$.70$ per head per month
Sheep .....	$.07$ per head per month

Where no caretaker or other facilities are provided by the Department the grazing rental on a head tax basis is as follows:

Horses .....	$\$.45$ per head per month
Cattle .....	$.35$ per head per month

There were nineteen Departmental grazing reserves and community pastures in operation and three community pastures in process of formation at the commencement of the fiscal year. During the year the Department completed formation of the Poll Haven Reserve and the Comrey Reserve and commenced formation of three new grazing reserves: Cresthill Reserve, township 43, range 2, and townships 43 and 44, range 3, west of the 4th meridian; Dunn Lake Reserve, townships 43 and 44, range 3, west of the 4th meridian; and Lakes Grazing Reserve, township 38, range 6, west of the 4th meridian. The Wainwright Reserve is still in process of formation.

The following is a summary of the grazing reserves and community pastures:

*Departmental Reserves (Permanent Caretakers)*

*Vauxhaul Provincial Grazing Reserve*

Originally contained 165,500 acres but due to withdrawals it now contains 164,495.75 acres. There are eighty-seven and three-quarter miles of fencing on the reserve. Additional help was required during the year for range riding, building and repairing fences.

In order to facilitate the operation of the Vauxhall Reserve which covers such a large area it was decided to divide the reserve into allotments.

Several allotments were made to groups of the larger stockholders of the Association who operate jointly the lands contained in the allotment under the supervision of the Department. The allotment holders are responsible for the care of their stock and the fences on the area allotted to them. Under this procedure the Department retained, under the direct supervision of the caretaker, an area of 33,873.10 acres to accommodate the stock of the small stock owners. This policy was approved by the members of the Association and has proven quite satisfactory.

On the area operated by the Department under a permanent caretaker for the use of small stock owners, 38 permits were issued for the grazing of 569 cattle.

The area allotted to the larger stockholders for cattle was 74,678.10 acres, capable of carrying 2,489 head of cattle for the six-month summer grazing period. The area allotted for the grazing of sheep was 55,625.55 acres, capable of grazing 4,635 sheep the year round.

#### *Twin River Provincial Grazing Reserve*

This reserve covers an area of 21,380 acres. There are twenty-four miles of fencing. Forty-six permits were issued for grazing of 1,272 cattle and ten horses. The caretaker resides on the reserve during grazing season.

*Reserves handled by Association* (Association responsible for upkeep and care of the stock).

#### *Tulliby Lake Provincial Grazing Reserve*

Area 22,000 acres. One permit was issued for the grazing of 250 cattle.

#### GRAZING RESERVES UNDER LONG TERM LEASE BY ASSOCIATIONS

Cattle River Reserve .....	6,318	acres
Fir Grove Reserve .....	3,750	"
Ross Lake Reserve .....	4,473	"
Barnwell Reserve .....	5,467	"
M.D. of Eureka Reserve .....	3,993	"
Pipeline Reserve .....	23,175	"
Many Island Reserve .....	17,652	"
Hilda Reserve .....	26,350	"
Bluefield Reserve .....	11,602	"
M.D. of Forty Mile—Bow Island Reserve .....	24,866	"
Bowell West Reserve .....	8,211	"
Rocky Coulee Reserve .....	4,432	"
Drowning Ford Reserve .....	33,069	"
Blackfoot Reserve .....	24,614	"
Nemiscam Reserve .....	4,781	"
Cherry Grove Reserve .....	1,274	"
Comrey Reserve .....	29,247	"
Poll Haven Reserve .....	10,462	"

In the Canmore-Exshaw open range, 81 head of stock were grazed under open range grazing permits.

An investigation was made of townships 38 to 45, ranges 1 to 5, west of the 4th meridian, in respect to the carrying capacity and use being made of the land, and as a result, the carrying capacity in townships 38 to 43, ranges 1 to 5, west of the 4th meridian, and township 44, ranges 1 to 4, west of the 4th meridian, was changed to 50 acres per head instead of 32 acres per head.

#### LONG TERM GRAZING LEASES

Leases in force April 1, 1949 .....	1,929	2,767,584.00
Leases issued .....	133	198,815.00
Area added to existing leases .....		22,474.00
Leases cancelled .....	136	115,462.00
Decrease by withdrawal .....		64,013.00
Adjustments .....	9	21,745.00
Total number and area of existing leases .....	1,917	2,787,653.00

Details pertaining to the revenue in connection with the administration of public lands may be found in the report of the Accounting Division of this Department.

#### SCHOOL LANDS

During the fiscal year seven hundred and six parcels of school land including eighty town lots were offered for sale throughout the Province at public auction and as a result four

hundred and eighteen parcels and sixty-eight town lots were sold. This is double the number of school lands sold last year.

Most of the auction sales were conducted by the field inspectors during the winter months and the sales were well attended. The highest price received for a parcel of school land was \$65.00 an acre. The approximate average sale price for public and school land offered for sale was \$14.58 an acre, which is very satisfactory. Collection from new school land sale accounts opened during the fiscal year was:

Principal .....	\$146,272.24
Interest .....	3,990.55
<hr/>	
	\$150,262.79

The total revenue derived from all school land sale accounts for the fiscal year was:

Principal .....	\$255,010.99
Interest .....	23,886.06
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	\$278,896.15

The following is a summary of other school land business transacted:

#### SCHOOL LAND SALES

No. of active sales at April 1, 1949 .....	445	66,996.81
New Sales .....	465	61,455.84
No. of sales cancelled .....	Nil	Nil
No. of sales patented .....	128	10,792.86
No. of active sales at March 31, 1950 .....	782	117,659.79

#### MISCELLANEOUS LEASES

Leases in force at April 1, 1949 .....	73	2,759.30
Leases issued during fiscal year .....	10	353.52
Leases cancelled during fiscal year .....	14	237.53
Leases in force at March 31, 1950 .....	69	2,875.29

#### LICENSES OF OCCUPATION

Licenses in force at April 1, 1949 .....	46	503.99
Licenses issued during fiscal year .....	2	4.00
Licenses cancelled during fiscal year .....	2	0.62
Licenses in force at March 31, 1950 .....	46	507.37

#### CULTIVATION LEASES

Leases in force at April 1, 1949 .....	1,436	280,713.47
Leases issued during fiscal year .....	268	50,660.70
Leases cancelled during fiscal year .....	334	74,007.74
Leases in force at March 31, 1950 .....	1,370	257,366.43

#### GRAZING PERMITS ISSUED

2,578      474,991.56

#### CULTIVATION PERMITS issued

21      625

#### HAY PERMITS issued

228      2,609 tons

#### HAY SEIZURES

Nil

#### ASSIGNMENTS REGISTERED (Leases, permits and sales)

136

Statement of revenue pertaining to School Lands may be found in report of the Accounting Division.

Note: The term "Leases cancelled during the fiscal year" includes leases which expired.

1949-50

## Forestry

### REPORT OF DIRECTOR OF FORESTRY—E. S. HUESTIS

The annual report for this division for 1948-49 started with a very encouraging report on the forest fire situation in the province. The year 1949-50 shows a very different picture. The spring opened up early and continued dry far past the usual spring rainy period and as a result we were faced with one of the worst fire seasons ever experienced in this province.

Action was taken by the Forest Service on 323 fires during the year under review. These fires burned over 1,424,000 acres, included in which were 264,000 acres of merchantable timber. The estimated stumpage value of this timber was \$1,777,000.00. The cost of fire fighting totalled \$267,000.00.

The above figures compare very unfavorably with 1948-49 when 184 fires burned over 293,000 acres including 48,000 acres of merchantable timber with an estimated stumpage value of \$263,000.00. The cost of fire fighting totalled \$91,000.00.

The immediate and natural question which arises is, who was responsible for this large number of fires and the resultant heavy losses and high costs? A review of the statistics shows that lightning, an uncontrollable factor, caused 6.8% of the fires, burning 2.1% of the total area and destroying 3.8% of the merchantable timber. In the unknown class amounting to 13.4% of the fires, 4.5% of the area was burned and 1.5% of the timber destroyed. There may be contained losses by uncontrollable factors such as lightning, but more likely most of these were caused by the people of the province.

The above figures show that the human element, the people of Alberta, in one way or another was responsible for more than 80% of our fires and possibly more than 90%.

Campers and smokers caused the greatest number of fires, 31% of the total, while the settler followed close behind, causing 23.6% of the fires; but the settler was responsible for burning 42.2% of the area and 36.9% of the merchantable timber, while the campers and smokers combined burned only 15.1% of the area and 11.5% of the merchantable timber.

The settler then, the person most dependent on the forests for a living, for protection and for conservation of moisture, is guilty of causing the greatest losses by fire.

Most settlers are careful with fire. They burn their slash from clearing operations when it is safe, fearing forest fires and knowing their dependence on the forest. There are many settlers, however, who have not learned the truth about fires, of potential lumber destroyed, of top soil burned and lost for many years, and of lowering water tables, causing a shortage of that most vital of all factors in the growing of crops for food.

It is true that 8.9% of the fires were caused by railways, but the acreage and timber burned were negligible. Industrial

operations caused 3.5% of the fires and 2% of the area but no merchantable timber. Incendiарism caused 7.3% of the fires, 3.3% of the area and 1.7% of the merchantable timber loss. The settler, however, is responsible for a greater percentage of all losses than any other factor.

In the last annual report mention was made of our negotiations with two commercial companies for the purpose of completing forest inventory of the province.

On November 2, 1949, an agreement was entered into with The Photographic Survey Corporation of Toronto to carry out aerial photography, base mapping and forest inventory. In preparing the agreement it was decided to make use of all suitable aerial photography already completed by the Dominion Government as well as all base maps completed by them, in order to avoid duplication and cut down costs.

Under the agreement the entire province of 255,000 square miles is to be photographed at 3,333 feet to one inch, giving a complete set of photos for the use of industry, government agencies and others. From these photos base maps are to be prepared on 185,000 square miles not already mapped. On these base maps the forest inventory is to be compiled from photographs at 1,320 feet to one inch. The total area of forest area to be covered amounts to 95,000 square miles, 40,000 square miles having already been photographed, leaving the company 55,000 square miles to complete. Photos of the entire area will be available. From these photographs, combined with field checking, the inventory of our timber resources is to be made up. We will then be in a position to assess our forest wealth and determine our maximum annual cut of timber.

Aerial photographs will be of value to oil companies in exploration work, soil surveys, geological surveys, water surveys, the planning of roads and settlements and numerous other uses by industry and government departments.

In the report for the last fiscal year mention was made of the selection of Wallace A. Delahey of Toronto as a one man commission to investigate forestry in Alberta. He spent the greater part of the year in his investigation and returned to Toronto late in the fiscal year to write his report. This report will be received with a great deal of interest next year.

For the second year in succession our production of lumber has decreased from the all time high of 390 million feet board measure in 1948. The lumber production for the year under review amounted to 244 million feet board measure. In addition, there were 740,000 ties and 4 $\frac{1}{3}$  million lineal feet of mine timber produced.

With the passing of The Forests Act in March, 1949, something new was added to the method of selling timber stands by the department. The machinery for the setting up of an appeal board allowed the unsuccessful applicant for timber to appeal the awarding of a license berth to another party if he felt that the timber was necessary to his operations in the area. The board

is composed of a chairman, Mr. H. G. Jensen, appointed by the Minister, one member selected from the Alberta Forest Products Association, and one member from the smaller operators. A secretary is appointed from the department.

Prior to 1933 all trees planted by farmers in Alberta came from the Dominion Government nurseries in Saskatchewan and Manitoba. From that year on, the Provincial Service has carried on a forest nursery at the Oliver Institute and has distributed trees to supplement the Dominion Government supply. In the year under review it was decided to select larger quarters, put up new packing sheds and a seed extraction plant and generally enlarge the nursery and its output. It will require a few years to get into full production, but a very good start has been made at the new location. The department is working towards a goal of one million trees per year.

The usual Ranger School was not held this year. However, all Superintendents and Inspectors held a very successful meeting in February of 1950 with Mr. Wallace A. Delahey sitting in.

In the same month and early March, a very successful forest conservation and wildlife course was held at the Banff School of Fine Arts. The course was organized jointly by the Department of Extension of the University of Alberta, the Dominion Parks Department and our own department. The Department of Extension took charge of the courses and lecturers were drawn from all three participating organizations. Fifteen of our forestry personnel attended this five weeks' course and received very good instruction and training in subjects related to their work.

For the first time in the history of this province, our forest rangers are now outfitted with uniforms. These are smartly styled in forest green color with red shoulder patches. Game and fishery staff are similarly equipped having gold and green shoulder patches respectively to denote their branch of the department.

Our thanks are due to many publicity agencies for their assistance in publicizing the seriousness of the forest fire situation during the fiscal year. The press and the radio did an excellent job of reporting the fire situation to the public and warning of its increasing and continued menace. The Canadian Forestry Association, with their caravan lecture tours, continued the program of fire prevention which they have carried on for many years. A number of manufacturers, especially the tobacco firms, have carried on a fire prevention campaign throughout the year and this is very much appreciated by the department.

Our forestry staff was augmented during the year by the employment of eight graduate foresters. V. Heath was employed as a Forest Engineer, working out of head office; O. K. Bradwell, S. R. Hughes, J. D. Clark and C. Jackson were appointed as Assistant Superintendents on the Crowsnest, Bow River, Clearwater and Brazeau-Athabasca Forest Reserves respectively. In addition, four foresters were employed and loaned to The Photographic Survey Corporation for three and a half years under the

terms of the contract. These men will return to us well-trained to continue this type of work in our forest survey division. It is intended that the forest inventory will be enlarged on completion of the company's work.

In concluding this report, an appeal is made to those settlers in or near forested areas who have been careless with fire in the past, to be more careful in the future. You will need the timber for building material and shelter. You will need the top soil for future crops.

### FIRE SUPPRESSION

During the fire season of 1949 a total of 314 fires were dealt with as shown below in classes:

- 45 Class "A" or small fires (less than  $\frac{1}{4}$  of an acre).
- 65 Class "B" fires (over  $\frac{1}{4}$  acre up to 10 acres).
- 98 Class "C" fires (over 10 acres up to 500 acres).
- 106 Class "D" fires (over 500 acres).

#### COMPARISON OF FIRE CAUSES BY PERCENTAGES

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Campers .....	27.4	28.8	26.0	20.9	31.5	26.8	24.0	18.7	14.9	15.5	29.9	21.4
Smokers .....	3.6	5.0	4.8	2.2	3.3	7.5	6.5	8.8	5.5	6.6	12.5	9.6
Settlers .....	14.6	14.8	12.2	22.7	13.9	12.4	14.5	15.1	10.5	7.4	10.9	23.6
Railways .....	4.2	4.6	6.7	7.6	11.1	23.0	16.0	12.0	21.1	32.8	15.2	8.9
Lightning .....	2.3	4.0	2.8	1.6	.9	.4	3.4	6.0	4.4	4.1	3.8	6.8
Industrial Operations .....	1.4	1.4	.6	1.4	3.6	1.9	3.6	3.5	9.5	4.9	8.7	3.5
Incendiary .....	14.6	9.8	8.9	10.8	6.9	5.7	6.8	6.0	2.9	4.1	2.7	7.3
Public Works .....	.8	.6	....	.2	.5	.4	....	.4	....	....	....	1.6
Unclassified .....	9.0	13.4	16.9	8.8	10.2	7.5	6.5	13.4	6.9	.8	.6	3.9
Unknown .....	22.1	21.1	21.1	23.8	18.1	14.4	18.7	16.1	24.3	23.8	15.7	13.4

#### COMPARISON OF FIRE LOSSES AND CAUSES BY PERCENTAGES FOR THE YEAR 1949

	Fire Causes	Merchantable Losses	Total Acreage Burned
Campers .....	21.4	7.4	11.6
Smokers .....	9.6	4.1	3.5
Settlers .....	23.6	36.9	42.2
Railways .....	8.9	Nil	Nil
Lightning .....	6.8	3.8	2.1
Industrial Operations .....	3.5	Nil	2.0
Incendiary .....	7.3	1.7	3.3
Public Works .....	1.6	Nil	Nil
Unclassified .....	3.9	44.6	30.8
Unknown .....	13.4	1.5	4.5

### RAILWAY FIRE LOSSES, CALENDAR YEAR 1949

This statement deals only with fires burning on forested territory under the supervision of the Alberta Forest Service, and which started within 300 ft. of the centre line of the railway right-of-way.

#### CAUSES AND NUMBER OF FIRES:

Railway causes—Locomotives .....	23
Employees .....	3
Sub-total .....	26
Other causes—Campers and travellers .....	0
Settlers .....	6
Unknown .....	3
Unclassified .....	1
Industrial Operations .....	1
Sub-total .....	11
Total .....	37

## DEPARTMENT OF LANDS AND FORESTS

**NUMBER OF ACRES BURNED:**

Slashing or old burn .....	305
Timber Land .....	64
Young growth .....	371
Not forested .....	833
<b>TOTAL .....</b>	<b>1,578</b>
<hr/>	
<b>LOSS:</b>	
Timber .....	\$155.00
Young growth .....	411.00
Forest Products .....	Nil
Other Property .....	1.00
<b>TOTAL .....</b>	<b>\$567.00</b>

ANNUAL SUMMARY OF FOREST FIRE LOSSES—CALENDAR YEAR 1949  
FIRES WITHIN FOREST RESERVES

UNIT	Number of Fires				LANDS AFFECTED							LOSS										SUPPRESSION COSTS			
					OWNERSHIP		AREA		CONDITION			TIMBER (MERCHANTABLE AND CUT-OVER)						Loss							
	Class		Total		Public	Private	Total	Mer-chant-able Timber	Cut-over Timber	Young Growth	Not Forested	Saw-Timber	Other	Depre-ciation	Saw-Timber	Other	Loss	Loss of Timber	Loss of Young Growth	Loss of Other Property	Total Loss	Ranger Service	Other Expenditure	Total	
	A	B	C	D	Acres	Acres	Acres	Acres	Acres	Acres	Acres	M. Ft.B.M.	Cords	\$	M. ft. B.M.	Cords	\$	\$	\$	\$	\$	\$	\$	\$	
Campers .....	1	1	....	1	3	1,281.5	.....	1,281.5	270	.....	910.75	100.75	300	.....	.....	8	.....	908.00	4,550.00	.....	5,458.00	39.01	.....	39.01	
Smokers .....	2	3	1	....	6	10.5	45	55.5	.....	10.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32.73	19.00	51.73	
Settlers .....	4	1	4	2	11	21,533	1,636.25	23,169.25	16,961	1,065	2,644	2,499.25	3,010	14,044	917.25	66,640	324	216.00	41,442.25	3,015.00	490.00	44,947.25	30.47	.....	30.47
Railways .....	2	3	1	....	6	24.5	35	59.5	3.5	.....	56	6	8	.....	1	1	.....	27.00	.....	.....	27.00	58.18	2.35	.....	60.53
Lightning .....	5	3	4	2	14	5,563.5	.....	5,563.5	4,992	1.5	567	3	4,814	10,133	14,694.50	5,430	32,877	42,650.50	57,999.50	1,340.00	.....	59,339.50	618.53	7,651.32	8,269.85
Industrial Opt..	4	1	....	....	5	11	.....	11	.....	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43.33	.....	43.33	
Incendiary .....	1	1	....	1	1	5	5	5	5	.....	.....	.....	.....	.....	.....	60	.....	21.00	.....	.....	.....	4.55	.....	4.55	
Public Works .....	1	2	1	....	4	34.5	.....	34.5	9	.....	24	1.5	.....	91.8	36.75	.....	.....	.....	36.75	24.75	.....	61.50	108.68	.....	108.68
Unclassified .....	2	1	....	3	2	.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	10.00	.....	10.00	5.37	.....	5.37	
Unknown .....	3	....	1	1	5	1,116.8	538.5	1,655.3	55.2	970	389.6	240.5	699.25	12,052.3	5,820.00	.....	.....	.....	2,407.00	1,046.00	100.00	3,753.00	148.25	168.00	311.25
TOTALS ....	24	16	12	6	58	29,577.3	2,259.75	31,837.05	22,290.7	2,088.5	4,535.35	2,922.5	8,823.25	36,329.1	21,468.50	72,071	33,269	42,866.50	102,841.50	9,985.75	790.00	113,617.25	1,089.20	7,835.67	8,924.87

FIRES OUTSIDE FOREST RESERVES

Campers .....	7	18	18	22	65	158,360.95	13,138.5	171,499.45	31,517.95	3,855	54,369.5	81,757	234,810	72,949	5,052.00	14,722.65	183,913	65,874.08	132,052.43	211,462.00	150.00	343,664.43	1,650.65	78,735.09	75,885.74
Smokers .....	2	1	7	14	24	45,725	4,810	50,535	6,510	2,800	26,770	14,455	420,630	36,290	8,483.00	1,920	61,215	69,321.56	73,172.06	86,623.80	200.00	159,995.86	822.50	27,960.89	28,782.89
Settlers .....	4	23	36	63	541,706	51,089	592,795	135,509	37,920	152,170	267,196	60,831	3,197,634	71,410.00	7,013	893,451	460,108.00	617,939.50	811,498.50	50	929,483.00	1,824.95	71,206.80	73,081.25	
Railways .....	7	9	6	....	22	269.25	37.15	306.4	.....	180	5.5	120.9	.....	.....	.....	.....	.....	45.00	.....	45.00	.....	58.18	170.35	228.53	
Lightning .....	4	1	2	7	23	25,576.5	.....	23,576.5	3,065	2,460	4,055	13,999.5	250	.....	2,755	4,050	30.00	9,193.50	23,500.00	.....	32,693.50	706.24	12,967.52	13,673.76	
Industrial Opt..	2	2	1	1	6	28,540.75	.....	28,541.5	2,240.75	60	26,240	75	323	450.00	19	57.00	507.00	190,400.00	.....	190,907.00	1,824.77	20,618.84	21,943.61		
Incendiary .....	3	13	6	22	47,430	780	48,210	4,441	380	29,057	14,332	40	10,569	18,837	249,052.00	31,249.75	264,381.25	20.00	295,651.00	267.35	3,978.31	13,484.31	18,751.66		
Public Works .....	1	1	....	1	1	30	30	.....	.....	.....	30	.....	.....	.....	.....	.....	.....	36.75	24.75	.....	61.50	108.68	.....	108.68	
Unclassified .....	1	2	5	9	262,816	186,541	449,357	61,560	2	262,137	125,660	17,415	4,630	352.00	131,465	318,250	1,477.00	797,710.00	1,298,242.00	.....	2,095,952.00	571.18	11,605.39	12,176.57	
Unknown .....	2	6	15	42	61,514.8	4,499.5	66,014.3	11,483.7	1,550	21,076.1	31,954.5	2,280.25	44,242.3	22,980.00	1,090	13,657	21,057.00	26,106.62	84,628.50	300.00	111,035.18	557.35	18,516.32	19,073.67	
TOTALS ....	45	65	98	106	814	1,198,399.75	262,647.15	1,461,046.9	278,512.9	50,323.5	580,025.85	552,184.65	744,703.25	3,380,022.1	124,325.5	241,624.65	1,526,642	909,843.14	1,788,365.37	2,479,715.80	1,210.00	4,269,291.17	7,341.17	241,294.3	248,635.47

FIRES WITHIN AND WITHOUT FOREST RESERVES

Campers .....	8	19	18	23	68	159,642.45	13,138.5	172,780.95	31,787.95	3,855	55,280.25	81,857.75	235,110	72,949	5,052.00	14,722.65	183,921	65,874.08	132,960.43	216,012.00	150.00	349,122.43	1,689.66	78,735.09	75,424.75</td
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ANNUAL STATEMENT OF FIRES BY CAUSES, MONTHLY DISTRIBUTION, ETC.  
WITHIN AND OUTSIDE FOREST RESERVES, CALENDAR YEAR 1949

Cause	MONTHLY DISTRIBUTION												Forests Inside				Forests Outside						
	Number				Area				Damage				Deember				Deember						
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S				
Camp-fires .....	8	19	18	23	68	21.4	349,122.43	172,780.95	1	2	...	13	25	10	6	2	2	1	3	3,128.15	65	171,499.45	
Smokers .....	4	4	8	14	30	9.6	159,995.86	50,590.5	...	...	8	13	3	2	2	2	...	...	6	65.5	24	50,636	
Settlers .....	3	6	27	38	74	23.6	974,430.25	615,964.25	...	...	13	46	12	1	1	1	...	1	11,23,119.25	63	59,279.5		
Railways .....	9	12	7	7	28	8.	72,00	365.9	...	...	6	5	3	2	2	2	...	2	6	6	22	30,64	
Lightning .....	5	7	5	4	21	6.8	92,035.00	29,140	...	...	2	2	12	4	1	1	...	...	14	5,533.5	7	23,576.5	
Industrial Ops. ....	6	3	1	1	11	3.0	190,907.00	28,552.5	...	...	2	4	1	2	1	1	...	...	5	11	6	28,541.5	
Incendiary .....	...	4	13	6	23	7.3	295,672.00	48,215	...	...	5	10	4	2	...	...	...	1	5	22	4,8210		
Public Works .....	2	1	5	1	...	1.6	61,50	64.5	...	...	1	...	2	1	...	...	1	...	4	34.5	1	30	
Unclassified .....	3	2	2	2	12	3.9	2,095,962.00	449,359	...	...	1	13	16	3	1	1	...	...	3	2	9	449,357	
Unknown .....	5	6	16	15	42	13.4	111,035.13	66,014.3	...	...	1	13	16	3	5	1	1	...	...	5	1,635.3	37	64,359
<b>TO - ALS .....</b>	<b>45</b>	<b>65</b>	<b>98</b>	<b>106</b>	<b>314</b>	<b>100</b>	<b>4,269,291.17</b>	<b>1,461,046.9</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>64</b>	<b>124</b>	<b>42</b>	<b>32</b>	<b>19</b>	<b>10</b>	<b>11</b>	<b>5</b>	<b>3</b>	<b>58,31,837.05</b>	<b>266</b>	<b>1,429,299.85</b>
per Cent .....	14.3	20.7	31.2	33.8100			.3	.20,4139.5	13.4	10.2	6.0	3.2	3.5	1.6	1.0	1.0	1.0	1.0	18.5		81.5		

## DEPARTMENT OF LANDS AND FORESTS

## SUMMARY SHOWING TOTAL NUMBER OF FIRES AND BURNT OVER AREAS FROM 1939 TO 1949 INCLUSIVE

Year	Total No. of Fires	Total Acreage	Not Forested	Net Acreage
1939 .....	499	429,139.25	159,774.50	269,364.75
1940 .....	313	474,244.25	108,597.50	365,646.75
1941 .....	445	1,355,424.50	459,475.00	895,949.50
1942 .....	215	325,815.75	182,208.25	143,607.50
1943 .....	265	512,149.25	409,503.50	105,645.75
1944 .....	325	722,658.00	273,186.25	449,471.75
1945 .....	284	216,736.50	128,263.50	88,473.00
1946 .....	275	272,283.50	179,731.00	92,552.50
1947 .....	122	80,060.75	46,894.75	33,166.00
1948 .....	184	293,216.59	185,491.00	107,725.59
1949 .....	314	1,461,046.90	552,184.65	908,862.25
Totals .....	3,241	6,145,775.24	2,685,309.90	3,460,465.34

TIMBER CUT UNDER PERMIT ALBERTA FOREST RESERVES  
Fiscal Year 1949-50

	Crowsnest	Bow River	Clearwater	Brazeau-Athabasca	Cypress Hills	Totals
Number of Permits .....	100	87	30	104	195	516
Building Logs (Lin. ft.) .....	.....	14,319	.....	416	.....	14,735
Fence Posts (pieces) .....	1,540	3,465	5,780	.....	3,414	14,199
Fence Rails (pieces) .....	6,283	3,889	1,332	70	.....	11,574
Fuelwood (cords) .....	150	427	57	116	204	854
Lumber (ft. B.M.) .....	140,000	47,100	134,913	.....	1,729	323,742
Mine Timbers (Lin. ft.) .....	212,300	498,332	410,532	183,200	.....	1,304,364
Poles (Lin. ft.) .....	3,900	2,781	.....	.....	.....	6,681
Piling (Lin. ft.) .....	2,290	2,860	4,340	1,789	.....	11,279
Railway Ties (pieces) .....	.....	.....	.....	.....	.....	.....
Round Timbers (Lin. ft.) .....	.....	.....	.....	.....	25,000	25,000
Slabs (cords) .....	.....	47	.....	26	.....	73

TIMBER OPERATIONS ON ALBERTA FOREST RESERVES  
Fiscal Year 1949-50

Timber Sales	Crowsnest	Bow River	Clearwater	Brazeau-Athabasca	Totals
No. of active operations .....	17	8	15	47	87
Fuelwood (cords) .....	670	.....	2	.....	672
Lumber (F.B.M.) .....	9,808,000	775,003	7,940,180	18,461,420	36,984,603
Mine Timbers (lin. feet) ..	2,042,000	154,223	629,014	614,866	3,440,108
Mine Ties (pieces) .....	.....	.....	.....	2,537	2,537
Poles (power line, lin. ft.) ..	2,500	.....	5	3,380	5,885
Poles (corral, pieces) .....	.....	.....	12	.....	12
Piling (lineal feet) .....	.....	2,194	.....	.....	2,194
Pulpwood (cords) .....	.....	.....	.....	2,172	2,172
Rails (pieces) .....	4	.....	7,907	.....	7,911
Railway Ties (pieces) .....	.....	.....	38,566	201,101	240,667
Slabs (cords) .....	.....	17 1/4	.....	1,268	1,285 1/4
Fence Posts .....	1,700	.....	.....	.....	1,700
Fence Pickets (lineal feet) .....	9,900	.....	.....	.....	9,900

TIMBER OPERATIONS ON LANDS OUTSIDE OF FOREST RESERVES  
Fiscal Year 1949-50

	Timber Berths	Special Timber Permits	Total
Active Operations .....	574	327	901
Building Logs (lineal ft.) .....	24,214	39,600	63,814
Fence Posts (pieces) .....	21,016	5,455	26,471
Fence Rails (pieces) .....	13,490	1,291	14,781
Fuelwood (cords) .....	659	170	829
Lath (pieces) .....	449,650	150,490	600,140
Lumber (ft. B.M.) .....	236,216,459	11,558,301	247,774,760
Mine Timbers (lineal ft.) .....	1,417,229	123,616	1,540,845
Poles (lineal ft.) .....	40,735	82,652	123,387
Piling (lineal ft.) .....	2,629	.....	2,629
Pulpwood (cords) .....	229	.....	229
Railway Ties (pieces) .....	552,264	60,156	612,420
Slabs (cords) .....	2,144	12	2,156
Shingles (pieces) .....	.....	42,000	42,000

## FORESTRY

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## SETTLERS' TIMBER PERMITS

	Edmonton	Peace River	Total
Number of permits .....	1,723	641	2,364
Building Logs (lin. ft.) .....	59,262	29,671	88,933
Fence Posts (pieces) .....	222,474	69,705	292,179
Fence Rails (pieces) .....	9,863	61,485	71,348
Fuelwood (cords) .....	6,379	4,082	10,461
Lumber (ft. B.M.) .....	9,703,830	3,034,804	12,738,634
Mine timber (lin. ft.) .....	670,630	.....	670,630
Poles (lin. ft.) .....	28,798	600	29,398
Piling (lin. ft.) .....	.....	.....	.....
Pulpwood (cords) .....	1,066	2,087	3,153
Railway Ties (pieces) .....	500	.....	500
Shingle Bolts (cords) .....	3	3	6
Shingles (pieces) .....	.....	.....	.....
Boxwood (cords) .....	.....	60	60
Timber Seizures (number) .....	128	8	136
Slabs (cords) .....	.....	.....	.....

## GRAZING STATEMENT—ALBERTA FOREST SERVICE, 1949-50

Forest	No. of Permits	No. of Horses	No. of Cattle	No. of Sheep
Cypress Hills .....	61	147	3,237	.....
Crowsnest - Bow River .....	276	715	21,553	2,641
Clearwater .....	57	430	443	.....
Brazeau - Athabasca .....	98	602	42	5
Totals .....	492	1,894	25,275	2,646

	Total for the Period 1931 to 1949-50	Average Per Year
Number of Permits .....	9,763	488
Number of Horses .....	56,736	2,837
Number of Cattle .....	426,294	21,315
Number of Sheep .....	87,000	4,350

## DEPARTMENT OF LANDS AND FORESTS

**SUMMARY OF TIMBER OPERATIONS ON PROVINCIAL LANDS AND ALBERTA FOREST RESERVES  
FISCAL YEAR, 1949-50**

	PROVINCIAL LANDS			FOREST RESERVES			TOTAL	
	Timber Berths	Special Permits		Other Permits	Timber Sales	Other Permits		
		Timber Berths	Special Permits					
Active Operations .....	574	327	..	87	516	1,604		
Building Logs (lineal feet) .....	24,214	39,600	88,933	..	14,735	167,482		
Fence Posts (pieces) .....	21,016	5,455	292,179	1,700	14,199	334,549		
Fence Rails (pieces) .....	13,490	1,291	71,348	7,911	11,674	105,614		
Fuelwood (cords) .....	6,69	1,170	10,461	6,672	854	12,816		
Lath (pieces) .....	449,650	11,150,490	12,738,634	36,984,603	297,821,740	600,140		
Lumber (F.B.M.) .....	236,216,459	11,558,301	12,738,634	36,984,603	323,743	297,821,740		
Mine Timber (lineal feet) .....	1,417,229	123,616	670,630	3,440,103	1,304,364	6,965,942		
Mine Ties (pieces) .....	40,735	82,632	29,398	2,557	2,557	2,537		
Poles (pieces) .....	2,625	..	..	5,835	..	158,925		
Filing (lineal feet) .....	2,629	..	..	2,184	..	16,102		
Pulpwood (cords) .....	229	..	..	2,184	1,1279	7,289		
Railway Ties (pieces) .....	552,264	60,156	500	240,667	..	863,687		
Roof Poles (pieces) .....	..	..	..	..	820	..		
Shabs (cords) .....	2,144	12	..	1,255 <sup>1/4</sup>	73	3,514 <sup>1/4</sup>		
Shingle Boats (cords) .....	..	..	6	..	..	6		
Shingles (pieces) .....	..	42,000	..	..	..	42,000		
Boxwood (cords) .....	..	..	60	..	..	60		
Round Timbers (lineal feet) .....	..	..	..	..	25,000	25,000		
Timber Seizures (number) .....	..	..	136	..	..	136		

FORESTRY

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**IMPROVEMENT STATEMENT**  
Fiscal Year 1949-50

NEW CONSTRUCTION PROJECTS

MAINTENANCE PROJECTS:

## IMPROVEMENTS—STATEMENT OF MAN-DAYS WORKED

## NEW CONSTRUCTION PROJECTS:

Forest		Houses	Fences, etc.	Towers etc.	Water Supply systems	Telephones	Corrals	Grounds	Trails	Cabins	Toursit Shelters	Radio Frequencies	Freight Roads	Police Mobiles	Micelle Lathcous	
Cypress Hills	.....	374 1/2	163 1/2	.....	.....	2	17	.....	22 1/2	126 1/2	7	....	....	....	185	
Crowsnest	.....	39	39	3	17	.....	20	22	.....	120 1/2	....	....	....	....	101	
Bow River	.....	749	18 1/2	8	2 1/2	20	22	.....	248	10	7	....	....	....	213	
Clearwater	.....	23	23	.....	.....	54 1/2	3 1/2	.....	18 1/2	....	....	....	....	....	....	
Brazeau	.....	55	2	19	.....	8	.....	1	4	139	3	....	....	....	....	
Athabasca	.....	10	53 1/2	14 1/2	19	.....	.....	1	4	402	....	....	....	....	....	
N.A.F.D.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	112 1/2	
<b>TOTALS</b>	.....	1801	246 1/2	22 1/2	22	19 1/2	82 1/2	27 1/2	17	1	45	149	802	....	7	611 1/2

MAINTENANCE PROJECTS:

MODE OF TRANSPORTATION AND MILEAGE TRAVELED BY EMPLOYEES  
OF THE ALBERTA FOREST SERVICE

Fiscal Year 1949-50

Divisions	Foot	Saddle	Driving	Speeder	Auto	Canoe	Kayak	Rowboat	Motor-boat	Plane	Railway	Others	Totals
Northern Alberta Forest District .....	34,560	23,229	25,844	14,899	401,520	810	421	15,629	1,988	21,918	547,882	7,064	154,403
Crownest-Bow River Forest .....	4,527	21,976	804	.....	126,285	.....	36	.....	.....	.....	554	381	159,619
Clearwater Forest .....	2,520	13,046	423	965	61,513	.....	.....	.....	.....	.....	652	560	2,172
Brazeau-Athabasca Forest .....	7,752	8,565	3,196	409	83,092	.....	.....	.....	.....	.....	2,169	107,345	566
Cypress Hills Forest .....	267	1,791	1,27	.....	15,109	.....	.....	.....	.....	.....	566	17,870	.....
Radio .....	.....	.....	.....	.....	73,583	.....	.....	.....	.....	.....	.....	73,583	.....
<b>TOTALS</b> .....	<b>49,626</b>	<b>68,607</b>	<b>30,404</b>	<b>16,273</b>	<b>761,102</b>	<b>810</b>	<b>457</b>	<b>15,629</b>	<b>1,988</b>	<b>25,256</b>	<b>10,700</b>	<b>980,852</b>	

## TREES DISTRIBUTED SPRING, 1949

*Transplants*

White Spruce .....	17,001
Douglas Fir .....	2,918
Lodgepole Pine .....	11,146
Yellow Pine .....	1,672
Western Larch .....	2,009
Bur Oak .....	8,450
Red Oak .....	4,002
American Elm .....	2,895

*Cuttings*

Laurel Leaf Willow .....	20,775
Golden Willow .....	12,500
Northwest Poplar .....	31,150

*Ornamental Species*

Blue Spruce .....	9
Lilacs .....	6
Cotoneaster .....	6

*Seedlings*

White Spruce .....	900
Scotch Pine .....	50
Colorado Blue Spruce .....	50
Siberian Larch .....	24

## REPORT OF RADIO SUPERINTENDENT, A. EARNSHAW

Following the same system for opening the towers early, as was done the last two years, most of the towers in the NAFD were manned and in operation before the 15th of April. In some areas it is difficult to make an accurate estimate of the depth of snow in the bush and some difficulty was experienced by personnel travelling in these areas. A faster and more efficient method of travelling would be advantageous at this time of year, and in the opinion of the writer, the possibility should be considered of delivering tower men and supplies to the outlying towers, by helicopter.

One new member of the lookout men's staff had a tour of duty with the division of extremely short duration. He went to his tower in the area west of Edson during the month of May and was out again in civilization by the middle of June. After a short period in hospital recovering from a slight injury sustained during an argument with a bear, he decided that the life of a lookout man did not suit him and sought safer employment elsewhere. Other members of the lookout staff returned to civilization between the end of October and the end of November without any unpleasant incidents.

Two diesel-driven power plants were installed by this division during the year under review, one at the Whitecourt lookout tower and the other at the Forestry Headquarters at Lesser Slave Lake. These plants replaced the gasoline-driven ones which had been in operation for roughly ten years. The diesel plants are of a higher power output rating than the gasoline-driven plants. This is advantageous, especially at the divisional headquarters, where the surplus power may be made available for other purposes, such as house lighting, etc. At the end of the fiscal year these plants were both producing power at less than four cents per kilowatt hour. This figure includes fuel, lubricating oil and maintenance and is considerably below

the figure for the gasoline engines. A more accurate picture of the operation of these plants will be available by the end of the following year.

Because of the increasing cost of maintenance of the portable units (due to their increased age), an effort has been, and is being made, to secure an adequate substitute for the portable equipment at present in use by Forestry and other services. Besides examining commercially developed units currently being offered on the market, the division has investigated very thoroughly the possibility of using modified war surplus equipment. Some war surplus units were purchased and have been modified and placed in the field for tests. To date the results of these tests have been satisfactory and further development with a view to still further decreasing the size and weight of portable equipment is being carried out.

The area in which the Edmonton terminal station is situated has been rapidly expanding with the result that the station is practically surrounded by dwellings. This made it necessary for us to move both the transmitter and receivers to other points to avoid interference and also to avoid causing interference. Satisfactory sites were chosen, and the work of installation was commenced during the winter months. Complete development and testing of a five-channel receiver rack was carried out, the necessary control circuits were developed and tested and it is hoped that the installation can be completed during the early part of the coming fiscal year. When this installation is completed, simultaneous operation of two channels on the transmitter and receivers will be possible, which will expedite traffic handling considerably.

With a view to increasing the efficiency of mobile installations at present in operation in the Department and also to create a mechanically-sound mobile antenna, development of a new design was commenced. As a result of this development work a new mobile antenna, consisting of a base loading coil and a flexible standard whip, spring-mounted on the vehicle, has been evolved. By making the loading coil part of the radiator, there is a considerable increase in the efficiency of the antenna as a whole. This type of antenna will now become standard for all medium-wave installations in vehicles.

From time to time the writer has requested permission to use the aircraft owned by the Department of Public Works for trips on inspection or maintenance. Permission to use this aircraft has in most cases been granted and as pilot expense is eliminated a considerable saving of time and money has resulted from its use. Other Government officials have been carried as passengers and they have been able to carry out their work more speedily than if they had been forced to rely on ground transportation. On one flight, accompanied by the district Timber Inspector a potential tower site was located in the southern part of the Grande Prairie division. On another flight, officials of the Forest Inventory Division were enabled to observe the accuracy of their interpretation of aerial photographs in several areas. In addition to these uses of the Departmental aircraft,

during the 1949 fire season the Forestry Branch hired a commercial aircraft for the aerial delivery of fire-fighting equipment to a fire. The actual packing and dropping of six 10-gallon drums of gasoline, two drums of oil, six rolls of hose, tents and other miscellaneous equipment was done under the supervision of a member of this Division. The materials were successfully dropped without damage and the parachutes, which are of the expendable type described in a previous report, were all recovered.

The Eastern Rockies Forest Conservation Board in November, 1949, authorized the establishment of a short wave radio network in the Eastern Rockies Forest Conservation area. Immediately upon receipt of this authorization, work in connection with this project was commenced. The network involves the construction and installation of approximately 55 stations throughout the area, to be operated on a frequency in the order of 153 megacycles and to give adequate communication coverage throughout the entire area. Equipment has to be installed at all lookout points, ranger headquarters, divisional headquarters and in some vehicles. It involves the construction of power lines, equipment buildings and the installation of antennae, mast gear and primary power supplies, as well as the purchase and installation of radio equipment. Considerable progress has been made in connection with the purchase of suitable radio equipment, and in the design and construction of buildings, antennae, mast gear and control systems. It is expected that the entire system will be complete and in operation within two years, although the installation of equipment on mountain lookouts is, of necessity, limited to the summer season.

A consolidation of data in connection with the fire danger meter as described in previous reports is still being carried on by this division with the assistance of the meteorological service of the Department of Transport which now supplies daily forecasts. These include in addition to standard forecast items, such information as maximum and minimum relative humidity, and maximum and minimum wind velocity. These additional items enable us to forecast fire hazard in various areas by using fire danger meters. The accuracy of these forecasts is later checked against the estimated fire hazard and the actual fire occurrence. For the period in review, the area weather forecasts as received from the Department of Transport were approximately 80 per cent accurate. This figure appears to be low, but taking into consideration the relatively small number of reporting stations in the various areas, and the extremes of weather conditions which may be experienced in adjacent mountain areas, the accuracy of the forecast would appear to be satisfactory, at least until further reporting stations are installed.

The usual annual summary of engine operation and traffic is appended.

**A SUMMARY OF THE YEAR'S OPERATIONS 1949-50**  
**LOOKOUT STATIONS 60 WATT AND 100 WATT**

Station	Engine Time		Gas	Oil	Messages number	Words number
	hrs.	min.	Gals.	Qts.		
Adams Creek .....	113	01	50	3	378	4,338
Athabasca .....	260	00	20	6	159	2,278
Brazeau .....	315	00	90	6	2,799	62,470
Carrot Creek .....	423	33	104	10	1,707	29,679
Goose Mountain .....	346	10	89	7	568	6,824
Heart Lake .....	415	04	82	5	492	8,216
Lovett .....	253	22	137	7	651	9,446
Mayberne .....	315	06	75	4	686	10,800
Nose Mountain .....	337	10	92	8	436	5,062
Puskawaskau .....	322	51	130	15	591	10,977
Saskatoon Mountain .....	344	35	141	17	410	6,817
Whitecourt .....	553	09	153	15	3,121	67,757
Total .....	3,999	01	1,163	103	11,998	224,664

**HEADQUARTERS STATIONS**

Station	Engine Time		Gas	Oil	Messages number	Words number
	hrs.	min.	Gals.	Qts.		
Calgary .....					6,246	141,564
Edmonton .....					15,888	424,692
Edson .....					2,535	52,142
Grande Prairie .....					2,820	68,092
Lac La Biche .....					2,951	74,944
Peace River .....					1,609	47,920
Rocky Mtn. House .....					1,534	34,324
Slave Lake .....	2,728	00	354	48	1,251	29,216
Total .....	2,728	00	354	48	34,924	872,894
Grand Total .....	6,727	01	1,517	152	46,922	1,097,558

**NORTHERN ALBERTA FOREST DISTRICT**

*Report of Chief Timber Inspector, J. L. Janssen*

**FOREST PROTECTION**

*Weather and Fire Hazard*

The spring fire season in 1949 was one of the worst on record with an extreme fire hazard throughout the spring over all of the Northern Alberta Forest District.

This was aggravated by the desire of settlers to take advantage of the very favourable burning conditions with the result that a great many of their fires went out of control immediately after being set; then their neighbours set more fires on the pretext of back-firing to protect their buildings.

Forest officers were hampered in their attempts to control the situation by the fact that the old Act for the Prevention of Prairie and Forest Fires had been abolished, and the new Forests Act did not contain some of the more vital clauses of the old Act.

**Breton Division**

Snowfall the previous winter was light, and the ground very dry. An early spring break-up and continuous dry weather with high winds resulted in a very high fire hazard until July 15th when a heavy general rain occurred, and lowered the fire hazard. Frequent showers and light rains continued until the end of September. A light snow fell the middle of September and another one the middle of October; otherwise the fall was

dry with hazard normal. The ground went into the winter in a very dry condition.

#### Edmonton Division

The winter of 1948-49 had an average snowfall, most of which fell during December and January. Spring break-up occurred on March 23rd followed by dry cool weather until April 20th. Then the weather turned hot, but remained dry with high winds which caused an extremely high fire hazard until mid May, when some light showers occurred. Continual dry weather soon raised the fire hazard until mid-July, when heavy general rains covered the division. These rains lowered the hazard to normal, where it remained until the latter part of October when continued dry weather again raised the hazard. A fall of snow on December 6th closed the fire season.

#### Edson Division

Spring was unusually early and the snow had disappeared by the middle of April, with the exception of a few sheltered spots. Snowfall was below normal the previous winter and no floods were experienced during the spring run-off. The latter part of April and the first part of May were hot and dry, with high winds creating a very high fire hazard, which was relieved by light rains on May 16th. Precipitation during the summer was below normal and frequent periods of high fire hazard occurred due to hot weather and high winds. October was quite stormy, but November was sunny and warm, with considerable fire hazard. The season was closed by snow on December 15th.

#### Whitecourt Division

Snowfall the previous winter was below normal. Spring was very early with light run-off and very dry weather with high winds. The first fire occurred on April 10th. Summer came in dry but moisture conditions improved with heavy rains during the latter part of July and during August. Fire hazard during the fall was normal, rising slightly the last few days of October. The season closed with snow on November 9th.

#### Lac La Biche Division

Snowfall was light the previous winter and the ground very dry. Spring broke very early and dry, with no rain until the latter part of June. High winds, hot weather and lack of precipitation created a very high fire hazard, with some relief towards the end of June. Rainfall continued below normal throughout the summer and fall, with the fire hazard above normal the greater part of the time. Winter set in with the soil in a very dry condition.

#### Calling Lake Division

Winter snowfall was light, spring very early and dry, with high winds, and practically no moisture until the end of June, creating a very high fire hazard. The hazard was relieved somewhat by rain during July and August but the fall was again quite dry with an above normal hazard most of the time.

### Slave Lake Division

Snowfall was light the previous winter and the ground very dry. Spring broke early and warm, with high westerly winds. Hazard was very high until relieved by a general rain on May 28th, but rose sharply again in June; rains fell on the 25th. The hazard rose above normal again in July until reduced by rains on the 15th. Rains kept the hazard below normal for the balance of the season.

### Peace River Division

Spring opened early after a winter of light snowfall. Run-off was practically nil. Rivers broke April 12th with low water levels. April was very dry and grass fires started running about the 15th. Dry weather with high winds continued to the middle of May creating a high fire hazard. Local showers the middle of May eased the situation over parts of the Division, but the hazard remained high until relieved by general rains on June 25th. Precipitation was ample during July and August, and for the fall. A snow storm at the end of October closed the season.

### Grande Prairie Division

Snowfall the previous winter was quite heavy. Spring break-up occurred in early April. The weather was clear and warm with high winds to the latter part of June when some light showers temporarily reduced the fire hazard. Dry, hot weather continued to the middle of July when rains reduced the hazard. Scattered showers and cooler weather prevailed for the balance of the season, ending with a snowfall in the second week of December.

#### *Fire Prevention*

This is attempted by personal contact of the field staff with forest users whenever time permits, by posters, radio, articles in the press and moving pictures.

The press and local radio stations have been very co-operative this past season not only by warnings but by giving publicity to fires actually burning at the time. The Canadian Forestry Association, assisted by our field staff, again toured the Province with free picture shows and lectures on fire prevention.

An Order in Council was passed on May 2nd prohibiting all burning for the period of the spring fire hazard. Unfortunately, this came too late; a large number of fires had been started by settlers and many of these were running out of control, doing a great deal of damage, and creating a heavy smoke pall, which prevented the discovery of incipient fires.

#### *Fire Detection*

This depends on patrols by the field staff, co-operation in reporting fires by the general public, particularly forest users, by aircraft pilots, both military and civilian, and by our limited system of lookout towers, supplemented in a few instances by the use of hired aircraft by forestry personnel. During the

1949 season 44.6 per cent of our fires were first reported by the general public, 25.1 per cent by the rangers and 30.3 per cent by the towers. It is also interesting to note that before being discovered, 22.9 per cent of these fires had reached a size between 100 and 500 acres, and 13 per cent had reached 1,000 acres or over.

#### *Fire Suppression*

Suppressive action was taken on 266 fires of which only eight were caused by other than human agencies, leaving a total of 258 fires, caused mainly by someone's carelessness.

A table showing the classification, distribution and areas burned in acres follows:

Division	NUMBER OF FIRES					Merchantable Timber, Acres	Young Growth, Acres	Area Burned Acres
	A	B	C	D	Total			
Breton .....	...	1	5	13	19	4,600	21,635	92,915
Edmonton .....	2	1	10	5	18	27,909	3,207	32,575
Edson .....	1	9	4	...	14	371	5	594
Whitecourt .....	...	6	17	12	35	11,844	20,530	57,725
Lac La Biche .....	10	16	17	25	68	54,174	85,421	181,245
Calling Lake .....	...	1	6	7	14	835	10,805	22,110
Slave Lake .....	1	7	12	15	35	131,290	370,738	889,309
Grande Prairie .....	8	6	5	7	26	1,421	52,091	79,856
Peace River .....	...	1	3	10	14	18,410	18,945	60,860
Dist. 1 and 2 .....	6	...	10	7	23	6,121	4,251	14,197

#### ENTOMOLOGY

The field staff co-operated with the Dominion Forest Service Insect Survey by making sample collections which were forwarded to the Insect Laboratory at Kananaskis.

#### EQUIPMENT

A D6 Caterpillar tractor equipped with dozer was received in the late spring and a Dodge power wagon was purchased.

Two model Y Pacific Pumpers, two Paramount Cub Pumps and 12,000 feet of one and one-half inch fire hose, two fog nozzles and a quantity of smaller fire-fighting equipment were purchased as replacements.

#### PERSONNEL

Authority was received in the spring for the appointment of six additional assistant rangers, and four additional assistant inspectors. The assistant rangers were allotted to the Peace River, Grande Prairie, Slave Lake, Lac La Biche, Whitecourt and Edson Divisions and the assistant inspectors to the Peace River, Grande Prairie, Lac La Biche and Edson Divisions. We now have an assistant inspector on all divisions excepting Calling Lake and Breton. The field staff now consists of thirteen assistant rangers, forty-one rangers, seven assistant chief rangers, two timber inspectors and nine chief rangers. The chief and assistant chief rangers are also timber inspectors.

Some changes occurred in the personnel through resignations and other causes, but as a rule, the vacancies were soon filled as we received many applications for employment with the Forest Service, mainly from a better qualified class of applicant than during the war years.

The ranger meeting was not held this year owing mainly to the difficulty in securing accommodation, but a successful meeting of the chief rangers and inspectors was held in Edmonton during the first part of March.

Six of our field men attended a five-weeks' course of instruction for rangers and wardens held at Banff during the winter by the University of Alberta in co-operation with the Dominion Forest Service.

## IMPROVEMENTS

### Breton Division

*New Construction:* Work was proceeded with on three projects of which one, a hose-drying rack at Alder Flats cache, was completed, work was continued on the Alder Flats barn and work commenced on the Buck Creek ranger cabin. A total of 14½ man-days were spent on this and in addition 10 man-days were spent in assisting on the construction of a ranger cabin on District 2. All ranger labour used on these projects.

*Maintenance:* Existing improvements were maintained in a satisfactory condition. Sixteen man-days were spent on this and nineteen man-days on maintenance of equipment, using ranger labour.

### Edmonton Division

Work was proceeded with on seven projects of which three were completed, namely, the Drayton Valley cache, Brazeau tower road and the Pembina cabin. The uncompleted projects are the Drayton Valley pasture, Rat Creek road, Rat Creek and Zeta cabins. A total of 79½ man-days were spent by rangers on the above projects.

*Maintenance:* A total of 28 man-days were spent by rangers on maintenance of existing improvements. All equipment was maintained in good shape.

### Edson Division

*New Construction:* Work was proceeded with on five projects, one of which was completed, namely, the Berland River Trail, 23 miles. The uncompleted projects were the Wolf Creek trail, Little Smoky cabin, Tony River cabin and Wolf Creek cabin.

Seventeen one-drawer filing cabinets were constructed for use on other divisions by Ranger Ramstead at Edson.

*Maintenance:* The Grande Prairie trail was cleaned out between Mile 29 and Tony Creek, including construction of 13 bridges and laying 95 feet of corduroy. Mayberne tower cabin has been shingled outside; the inside finished and painted. New shingled roof has been put on the Athabasca River cabin; and the Athabasca trail has been opened for 18 miles.

### Whitecourt Division

*New Construction:* Two projects were undertaken of which one, the Whitecourt tower engine house, was completed. The

other, the Goose tower road, a major project, was not completed, but pushed through to within eleven miles of the tower. This entailed also the construction of a great many bridges. A total of 334½ man-days of ranger labour was expended on this plus work with the Forestry D6 and outside labour. It is hoped to complete this next year as it will give access, by truck, to this tower and a great deal of hitherto nearly inaccessible area.

#### *Lac La Biche Division*

*New Construction:* Work was proceeded with on eleven projects, three of which were completed, namely, the MacKay cabin, Conklin speeder shed and the Lac La Biche speeder home extension. Not completed were the Seibert Lake cabin, Fort Chipewyan cabin, McCallum cabin, Mountain cabin, Conklin cache, Big Eddy cabin, Conklin trail and Sandy River trail. A number of large fire warning signs were also constructed.

*Maintenance:* Maintenance and alterations were carried out on the following: Lac La Biche cache, Cold Lake cache, Lac La Biche aerial and Lac La Biche headquarters grounds.

#### *Calling Lake Division*

*New Construction:* Six miles of trail were pushed through by dozer to the Pelican Mountain tower site, but this trail was not completed.

*Maintenance:* Maintenance and alterations were carried out on the Lawrence Lake cabin, La Biche River cabin, Lawrence Lake cabin trail, Moyer Lake trail and Portage trail.

#### *Slave Lake Division*

*New Construction:* Work was proceeded with on two projects, one of which, the Sandy River pack trail, was completed. The Junction cabin was not completed.

*Maintenance:* Maintenance work was carried out on the Swan ranger house, Swan cabin, Wabasca cabin, McGowan cabin, Chalmer's cabin, Ottawauwau cabin, House Mountain cabin, Slave Lake cabin, Slave Lake barn, speeder house, cache and engine house, Flat Top tower and Deer Mountain tower. Eleven miles of the Deer Mountain telephone line were brushed out and two miles re-routed and the balance of the line maintained. The House Mountain telephone line was maintained, the Grizzly telephone line was brushed out for 12½ miles and eight miles of this was rebuilt. Poles were cut and peeled for use on the Martin and Flat Top telephone lines. One day's maintenance work was put on the Inverness wagon trail. The Flat Top trail was re-routed for nearly seven miles, widened, levelled and new culverts and bridges put in, also 440 yards of corduroy laid. Seventeen miles of the Deer Mountain trail were widened and two miles of this re-routed. A number of small bridges and culverts were put in. Windfalls were cleared on parts of the East Prairie and North Boundary trails.

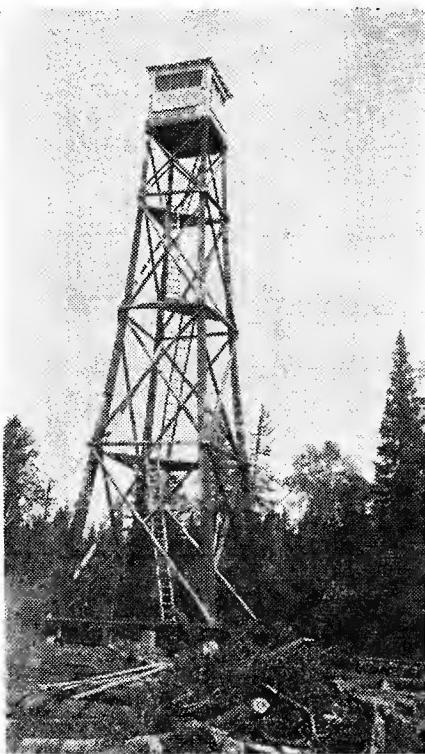
Fences were maintained on the Slave Lake, Wabasca and Swan station pastures.

The Headquarters, Swan Station and Wabasca grounds were maintained.

#### *Peace River Division*

*New Construction:* Work was proceeded with on four projects of which three were completed, namely, the Martin River cabin, the High Level cabin and the Hawk Hills lookout ladder. Not completed was the Upper Hay tool cache.

*Maintenance:* Maintenance and alterations were carried out on the Upper Hay cabin and the Little Red River cabin. These projects were not completed.



Heart Lake Tower, Lac La Biche District



Nose Mountain Tower, Grande Prairie District

#### *Grande Prairie Division*

*New Construction:* Work was initiated on five projects of which three were completed, namely, the Mountain Creek cabin, Home River cabin and Grovedale cache. The South Wapiti cabin and the Nose Mountain trail extension were not completed.

*Maintenance:* Maintenance work was carried out on the Proctor Lake cabin and Wembley cache, the Blueberry cache was moved to Spirit River and windfalls were cleared out of the more used trails.

#### *Districts 1 and 2*

*New Construction:* A three room ranger house was constructed on District 2 by ranger labour.

## TIMBER

The demand for timber, although slackening for a short period, again became strong and the field staff was fully occupied on cruising and inspection of timber applications as well as endeavouring to inspect all active operations. While the majority of new applications were disposed of within a reasonable length of time, a great many of the active operations did not receive adequate attention. The writer believes that all active operations should be inspected thoroughly, at least once a month during the season, to detect and correct any signs of poor operation as soon as possible.

## GAME

Many patrols were made by rangers to check on hunting and trapping activities in their districts. The field administration of registered trap-lines, applications for permits to trap beaver, and the sealing of beaver pelts are all handled by the rangers on the Northern Alberta Forest District.

Checking on hunting parties, gathering of evidence and prosecuting for infractions of The Game Act, takes up a considerable amount of the rangers' time.

## CO-OPERATION

The Royal Canadian Mounted Police continued to assist in gathering fire crews and prosecution of cases under both the Forests and Game Acts. Very welcome co-operation was received from the Royal Canadian Air Force and other aircraft in reporting fires.

A decided improvement in co-operation by the general public was observed, which was also very welcome.

## PROSECUTIONS

A total of 189 prosecutions were carried out under The Forests Act. Forest officers on the Northern Alberta Forest District initiated nine of these under Part II, and 56 under Part III of The Forests Act. Convictions were obtained on 56 of these. The Royal Canadian Mounted Police laid 124 informations under Part III of The Forests Act and obtained 111 convictions. The majority of the Royal Canadian Mounted Police cases were on areas outside of the Northern Alberta Forest District.

Forest officers also laid information and obtained convictions on approximately 60 cases under The Game Act.

**BOW RIVER FOREST RESERVE***Report of Forest Superintendent—L. R. West***FOREWORD**

When the Dominion Government controlled the natural resources of this Province the Crowsnest forest and the Bow River forest were separate units with headquarters at Pincher Creek and Calgary respectively. Upon the Province taking over control of its own natural resources, these two forests were united and called the Crowsnest-Bow River Forest with headquarters in Calgary. This arrangement remained in effect until June 1st, 1949, when the Crowsnest Forest again became a separate unit with headquarters at Blairmore, Alberta. As the separation of these two forests did not go into effect until June 1st, the revenue statements presented in this report include the revenue of the Crowsnest forest for the first two months of the fiscal year. This also applies to the statement of timber cut under authority of timber permits.

**FOREST PROTECTION**

The forest reserve staff remained the same as in the previous season and was made up as follows:

- 1 Forest superintendent
- 1 Assistant forest superintendent
- 1 Headquarters ranger
- 1 Forest clerk
- 1 Stenographer
- 5 District rangers
- 10 Assistant rangers
- 4 Lookout men

**(a) Fire Season**

An early spring was experienced, and the heavy snowfall of the winter disappeared without a great run off due to the dry condition of the ground during the previous fall. Little precipitation was received before the middle of May and a fairly serious fire hazard developed outside of the forest reserve, especially north of the Bow River. Rains that began about the middle of May terminated all spring fire hazards. Scattered showers and temperate weather during July and August kept the soil moist in most parts of the reserve. Precipitation was not as plentiful during the summer months in the Sentinel district and the north portion of the Aura district.

Hot dry weather was experienced during September. This condition lasted until the second week in October, when rain and snow covered the reserve and definitely terminated all fire hazards for the balance of the season.

**(b) Fire Prevention**

Prevention activities are only applicable to fires originating through human agencies, and consist of educating the public by

various means, such as posters, radio, lectures, moving pictures and by direct contact of users of the forest by our staff of rangers. All of the above methods of publicity were effectively used during the past season.

A new series of posters were issued last spring and these were widely distributed by the rangers along roads, trails, reserve boundaries and at other points where they would catch the public eye.

Local radio stations were very co-operative during the season in broadcasting timely warnings to the travelling public to be careful with camp fires, cigarette butts and matches while in timbered or heavily grassed areas.

The Canadian Forestry Association, assisted by our rangers arranged for and put on free picture shows and talks on forestry and conservation subjects in several of the small towns close to the reserve boundaries. These shows were well attended.

#### (c) *Fire Detection*

Fire detection methods, depend on the lookout system and field staff patrols. As in past seasons, the majority of the small fires were reported to the ranger staff by users of the reserve before they became large enough to be spotted by the lookouts.

#### (d) *Fire Suppression*

During the 1949 season a total of 18 fires were reported on the Bow River forest and immediate vicinity. Eight of these were inside the forest and ten on adjacent areas.

Seventy-five per cent of the fires within the reserve were the result of public works projects, consisting of the Bow trunk road and the Spray Lakes power development. On these projects full precautions were taken when burning brush piles, but due to sudden high winds, that are common in that area, some fires broke away. These were rapidly coralled with excellent co-operation being shown between ranger staff and private companies.

The eight fires inside the reserve burned over 81.8 acres, destroyed \$2,543.03 worth of timber and cost \$164.02 to extinguish, of which \$86.02 was ranger labor. The ten fires adjacent to the reserve burned over 1,713 acres, destroyed \$7,010.00 worth of timber and cost the Department in ranger labor the sum of \$140.64. Costs other than ranger labor were met by the municipal or local improvement districts in which they occurred.

The staff of the Bow River forest was maintained at the same strength as during the 1948-1949 season but the following changes in the field staff were made during the year.

*Sentinel District:* Lookout man W. Folwell resigned in July and his position was filled by the appointment of H. L. Hardy.

*Bighorn District:* The position of lookout man on Junction Mountain lookout was filled by the appointment of Lyle Hoy.

Assistant Ranger O. C. McGiffin resigned November 30th, and the position remains vacant.

*Elbow District:* Assistant Ranger G. L. Lambert resigned in the spring and his position was filled by the transfer of R. D. Moss former lookout man on the Carbondale Lookout, Crowsnest Forest Reserve.

*Jumping Pound District:* Assistant Ranger, F. A. Jones was transferred to the Castlemount district and Assistant Ranger R. A. Huth, was transferred from the Castlemount district to take his place. Assistant Ranger W. A. Wallator was transferred to the Castlemount District, Crowsnest Forest Reserve.

*Kananaskis District:* The former lookout man on the Castlemount district, W. J. Pickup, was transferred to the Kananaskis district as assistant ranger.

*Aura District:* Former lookout man, D. C. Dawson was appointed to the position of assistant ranger, and his place was filled by the appointment of Gordon Matthews as from April 1st, 1949.

*Headquarters' Staff:* S. R. Hughes was appointed assistant forest superintendent to fill the position vacated by F. G. Edgar on his appointment to a forest superintendent's position. I. B. Frew was transferred from the Crowl Lodge district of the Crowsnest Forest Reserve to fill the position of headquarters ranger on the Bow River Forest Reserve, taking the place of J. E. Bell who was promoted to the position of maintenance superintendent.

#### (e) *Fire-fighting Equipment*

A sufficient supply of fire-fighting equipment, to meet our needs, is always kept on hand. Last season the following items were added to our supply.

- 18,500 Ft. of 1½ inch Fire Hose
- 20 Brass nozzles
- 9 Paramount Cub pumps
- 4 Canvas relay tanks
- 3 Fog nozzles
- 2 Power saws

## FOREST ADMINISTRATION

Under this heading are considered timber disposal, grazing permits, grazing and miscellaneous uses, such as surface rights, trappers' cabins, roads, etc.

### TIMBER

Timber Sales on the Bow River Forest for the 1949-1950 season totalled 8 of which 2 were not operated. Timber Sale revenue for the season amounted to \$10,149.29 of which \$6,113.76 should be credited to Crowsnest forest timber sales as collections were made through this office until the Blairmore office was opened in June. Production from Bow River Forest Sales for the season was as follows:

## DEPARTMENT OF LANDS AND FORESTS

Sawn lumber, green .....	773,238	f.b.m.
Sawn lumber, poplar .....	1,770	f.b.m.
Piling, under 8" top .....	1,987	lin. ft.
Piling, over 8" top .....	207	lin. ft.
Mine props, green 5"-7" tops .....	8,197	lin. ft.
Mine props, dry 3"-9" tops .....	146,026	lin. ft.
Slabs .....	17 1/4	cords

During the year 87 Timber Permits were issued from this office with a total revenue \$6,098.61. The following material was covered by these permits.

Mine props, 3"-5" tops .....	192,900	lin. ft.
Mine props, 5"-7" tops .....	301,932	lin. ft.
Mine props, 7"-9" tops .....	2,500	lin. ft.
Mine Props, 10" tops .....	1,000	lin. ft.
Sawn lumber, dry .....	36,600	f.b.m.
Sawn lumber, green .....	10,500	f.b.m.
Building logs, not exceeding 8" tops .....	11,178	lin. ft.
Building logs, over 8" tops .....	360	lin. ft.
Slabs .....	47	cords
Cordwood, dry .....	247	cords
Cordwood, green .....	180	cords
Piling, under 8" tops .....	2,860	lin. ft.
Fence rails, 3" tops .....	3,889	pieces
Fence posts, 7' x 5", dry .....	2,465	pieces
Fence posts, 7' x 5", green willow .....	1,000	pieces
Fence pickets .....	1,200	pieces
Roof poles, dry 14" x 3" .....	820	pieces
Telephone poles, 25" x 8" .....	1,179	lin. ft.
Telephone pole stubs, not over 8" tops .....	190	lin. ft.
Telephone pole stubs, over 8" tops .....	1,412	lin. ft.

## HAY

One hay permit was issued covering 50 tons of hay, yielding a revenue of \$13.50.

## GRAZING

Grazing conditions during 1949 season were good in spite of below normal rainfall. Forage growth was very slow in starting as there was very little moisture in the ground at the start of the growing season and it never became as luxuriant as it usually does, but what there was, was of excellent quality and stock did well on it. Stock entered the reserve range in good condition, as they had been well-fed during the previous winter, and most of them left the reserve in excellent condition.

For the year a total of 79 grazing permits were issued on the Bow River forest covering 8,320 head of cattle and 335 head of horses. The revenue from this source amounted to \$40,710.00. Reported losses of stock in the Bow River forest were very light and amounted to only 27 head.

## USES

During the season 49 permits were issued covering miscellaneous and grazing uses. These permits cover such uses as trapper's cabins, stock association cabins and corrals, drift fences, mineral surface rights, etc. The revenue from this source was \$172.00.

## IMPROVEMENTS—NEW CONSTRUCTION

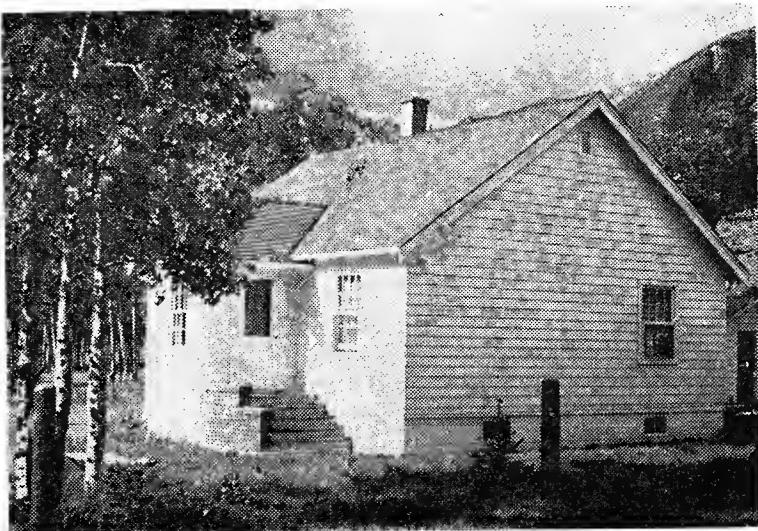
During the year, work proceeded on 20 projects, of which 10 were completed and the remaining 10 are in various stages of completion.

The completed projects were: Aura R.S. cottage, Bighorn R.S. cottage, Bighorn R.S. weather station, Elbow R.S. house, Elbow R.S. weather station, Highwood road, Kananaskis lookout road, Aura R.S. power system, Elbow R.S. power system, Elbow R.S. water supply.



Elbow Ranger Station House, Bow River Forest

The incompletely projects were as follows: Aura R.S. house, Aura R.S. storehouse, Bighorn R.S. bunkhouse, Bighorn R.S. storehouse, Canmore R.S. house addition, Elbow R.S. garage, Sentinel R.S. cottage, Sentinel district camp shelters, Kananaskis lookout and Bow trunk road.



Canmore Ranger Station House, Bow River Forest

On these projects 992½ ranger man-days were spent at a cost in ranger wages of \$5,434.85 and an expenditure of \$588,031.05 for materials, temporary labor, machine hire, etc. Of this latter sum \$561,169.19 was spent on the Bow trunk road and \$21,356.26 on the Highway road.

#### IMPROVEMENTS—MAINTENANCE

Existing improvements were maintained in a satisfactory condition. During the year work was done on 164 projects of various kinds. Work on these projects amounted to 1,828½ man-days at a cost in ranger wages of \$9,830.52 and an expenditure of \$4,889.42 for materials, temporary labor, etc.

#### STATEMENT OF REVENUE COLLECTED Season 1949-50

Timber sales .....	\$ 10,149.29
Timber permits .....	6,098.61
Grazing .....	40,710.00
Hay .....	13.50
Game .....	6,521.69
Fishing .....	1,619.35
Grazing uses .....	75.00
Miscellaneous uses .....	97.00
Maps .....	40.50
Miscellaneous .....	31.50
Total .....	\$ 65,356.44

The mileage covered by the entire staff in the course of their duties throughout the season was as follows:

Mode of Travel	Mileage
Car or truck .....	85,025
Saddle horse .....	17,170
Team .....	1,398
Foot .....	2,904
Tractor .....	157
Boat .....	36
Snowshoes .....	237
Skis .....	93
Bus .....	197
Train .....	209
Total .....	107,426

#### BRAZEAU-ATHABASKA RESERVE

*Report of Forest Superintendent, D. Buck*

At the close of the fiscal year ending March 31st, 1950, the Brazeau-Athabaska Reserve seems to be non-existent in so far as head office administration is concerned, after approximately forty years in operation with other reserves to the south. The other reserves now function under a Dominion-Provincial agreement with the Eastern Rockies Forest Conservation Board recommending the improvements to be made.

This Board has as its primary purpose the protection of timber on the slopes of the Saskatchewan River and its tributaries in order to insure an adequate and continued supply of water to the prairies; this will include the construction of roads and the orderly development of natural resources within the area.

Although there are burnt-over areas within the reserve and the Edson division, young growth is quickly covering over the scars. This area has produced a large portion of the total timber production in the past, perhaps too much from a scientific point of view, particularly during the second world war.

The district produces the fastest-growing timber in the province, where 65-year-old lodgepole pine will produce four tie trees and at the same time ensure a regulated water flow from the headwaters of the Pembina River, which passes through a large section of north-western Alberta's farm lands. The McLeod, Hay, Berland, Little Smoky, tributaries of the Big Smoky and Porcupine Rivers all head within this Reserve to unite with the Athabasca and Peace Rivers, forming one of the world's largest systems—the McKenzie River.

The reserve is also famous in many countries for its big game hunting.

#### *Personnel*

Several changes in the field staff were made during the year, E. R. Stanley was promoted to assistant timber inspector with headquarters at Peace River, also A. Fraser and A. R. Haight left the service.

In order to fill these vacancies, several transfers were effected in order to place men in positions to which it was considered they were most suited. Four assistant rangers were appointed to maintain the authorized field staff.

#### *Fire Season*

General weather conditions throughout the Brazeau-Athabasca reserves during the 1949 fire season were unfavourable from a forest protection point of view. The unusually low amount of precipitation was poorly distributed throughout the season, which coupled with the early run-off of the previous winter's snow resulted in reduced flow in all rivers. Some small creeks dried up completely during the summer months.

Late frosts at night followed by hot days last spring brought the fire hazard to its highest level for the season. The close correlation of weather to hazard is illustrated by the fact that nine fires comprising 53 per cent of the total for the season, occurred during the dry period which continued until the latter part of May. The fire season closed during the latter part of October when snow covered the reserves and the lookout personnel were relieved of their duties. This snow melted off and all indications were for a green Christmas but the weather changed December 20th, and a very severe winter followed.

Of the seventeen fires which were extinguished last season, seven occurred on the Athabasca Reserve and ten on the Brazeau. Of this total, nine fires were Class A, or less than a quarter acre in extent, six were less than ten acres, two were under fifty acres with a total loss of an estimated 305,000 f.b.m. saw timber and 94 cords of young growth. This again is a very creditable

achievement by the field staff and lookout personnel who reported smokes promptly and accurately, also the former who spared no effort in order to reach these fires quickly, although at least three fires burnt in places which were difficult of access.

#### *Fire Detection*

This reserve is served by five lookout stations within its boundaries and at least three others which are adjacent to the east and northern boundaries. All these stations are in radio communication with each other at all times and the field staff have radio schedules. In addition, four of these towers are in telephone communication with each other and the rangers, consequently the only improvement which could be effected in this regard is more and better stations.

Our relationship with the public and R.C.M.P. has been very satisfactory.

The number of miles and methods of travel by the staff in the course of their duties for the past year is as follows:

Mode of Transportation	Miles
Automobile (including trucks) .....	83,092
Railway Speeder .....	409
Foot .....	7,752
Saddlehorse .....	8,565
Driving team .....	3,196
Snowshoes .....	487
Dog Team .....	222
Railway .....	2,172
Bus .....	1,500
Total .....	107,345

#### *Forest Management*

Contrary to expectations, the total production of lumber during the past year shows an increase of approximately three million feet over the previous one. However, tie and mine timber production is less and the revenue from timber operations of all kinds is considerably less, partly attributable to the fact that several large guarantee deposits were credited to royalties and these do not show in the records as having been credited as such.

It is noted that under date of December 19, 1949, the Edmonton Pulp and Paper Mills Limited were granted privileges on two tracts of timber within the reserve from which the Company has the right to select all or part, together with other areas in the Province, as cutting areas for the supply of wood at their proposed plant. These two proposed cutting areas contain stands of mature spruce and balsam and their removal on a sustained yield basis would be beneficial to all concerned.

Operators last fall seemed very skeptical of the lumber market and accordingly reduced their winter's cut of lumber. However, their pessimism was short-lived, for towards spring the market improved and prices were better than a year ago. This upsurge can be too late for some who have not made previous arrangements and whose timber was inaccessible after the spring breakup.

The following lists show revenue collected and material produced:

## REVENUE 1949-50

Timber dues .....	\$ 69,620.65
Guaranteed deposits .....	7,896.00
Timber application deposit .....	839.83
Timber seizures .....	660.00
Timber permits .....	654.15
Rentals and renewals (timber) .....	55.60
Grazing permits .....	1,553.40
Hay permits .....	1.50
Miscellaneous use permits .....	960.40
Map sales .....	14.90
Game revenue .....	5,433.91
Fisheries revenue .....	833.00
Credit suspense .....	622.33
	\$ 89,145.67
Debit suspense .....	307.45
Total .....	\$ 88,838.22
Revenue collected through head office .....	38,469.67
	\$ 127,307.89
Total Revenue Collected .....	\$ 42,216.17
Revenue decrease .....	

## TIMBER REPORT 1949-50

## PRODUCED FROM TIMBER SALES:

No. of cutting permits issued .....	47
No. of cutting permits inactive .....	7
Lumber, (f.b.m.) .....	18,461,420
Railway ties, (pieces) .....	201,101
Mine timbers, green and dry, (lineal ft.) .....	614,866
Mine ties (pieces) .....	2,537
Slabs (cords) .....	1,268
Power Poles, (lineal ft.) .....	3,380
Pulpwood, dry (cords) .....	487

## PRODUCED FROM TIMBER PERMITS:

Mine timbers, dry, (lineal ft.) .....	183,200
Slabs (cords) .....	26
Pulpwood, dry (cords) .....	50
Building logs (lineal ft.) .....	416
Piling (lineal ft.) .....	1,789
Fence rails (pieces) .....	70
Fuelwood, dry (cords) .....	16

## TIMBER DESTROYED IN STRIP-MINE OPERATIONS:

Pulpwood (cords) .....	1,685
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## TOTAL TIMBER PRODUCTS MANUFACTURED IN BRAZEAU-ATHABASKA FOREST RESERVES:

Lumber (f.b.m.) .....	18,461,420
Railway ties (pieces) .....	201,101
Mine timbers, green and dry, (lineal ft.) .....	798,066
Mine ties (pieces) .....	2,537
Slabs (cords) .....	1,294
Pulpwood (cords) .....	2,222
Power poles, (lineal ft.) .....	3,380
Building logs, (lineal ft.) .....	416
Piling, (lineal ft.) .....	1,789
Fence rails (pieces) .....	70
Fuelwood, dry (cords) .....	16

*Uses of Land*

Altogether 89 miscellaneous use permits were issued to cover the following:

PROJECTS	NUMBER
Surface Rights .....	16
Hunting Lodge .....	1
Pastures .....	5
Trapper's Cabins .....	84
Prospector's Cabins .....	1
Stock-Cabin .....	1
Telephone Line .....	1
Drift Fence .....	1
Pipe Lines .....	2
Mill and Storage Sites .....	6
Boathouse .....	1
Cultivation Tracts .....	2
Power Lines .....	6
Dams .....	2
Creek-Diversions .....	2
Fisherman's Cabin .....	1

In addition to the above, twelve Board of Arbitration Orders were issued to coal mining companies who have extended their

operations, mostly in the direction of strip mining. Several large seams of coal have been uncovered.

The work of clearing the land to be stripped, and later, the burning of timber, estimated at 1,685 cords of green spruce and balsam, was carried out under the supervision of the district forest officer with the excellent co-operation of the company officials.

#### *Improvements*

Three extra men were employed for four months during the summer to assist with maintenance and new construction projects, one of these three being the Caterpillar tractor operator.

#### *New Construction*

No new major construction projects were undertaken last year but a few minor ones were essential. Two camp kitchens were constructed on the lower road, one at Jarvis Lake and the other at the Big Berland bridge. Both of these camp buildings are located in beautiful surroundings and have been completed with cement floors, regular camp stoves set in cement, tables, benches and toilet facilities, but we have had difficulty in preventing the marring of these surroundings with litter of all descriptions.

Construction of the Winter Creek barn was undertaken during the slack time to replace the old one which had been an eye-sore for several years. The new barn is constructed from salvage lumber taken from abandoned camp buildings; it has two and a half double stalls, hip roof, and is set on a surface cement foundation. The hay which is put up annually on the meadows at this point can now be put into the barn, left and fed to the horses during the winter without all the trouble of building fences to protect the stacks, etc.



Lovett Lookout Tower and Cabin, Brazeau-Athabasca Forest

The Muskeg Fly shed is a small shelter for stock to hold them around the pasture during fly time. The Lovett lookout engine shed was also necessary upon the completion of the new cabin and steel tower at this lookout since the original shed was too far from the new site for the efficient distribution of electrical power.

The moving of the Athabasca lookout telephone line is in line with the policy to keep phone lines as close as possible to trails or roads. A car road was constructed to the lookout last summer; although usually listed under maintenance approximately half of the three and a half miles of line have been set on poles. It is listed under new construction, although it was not authorized as such.



Pembina Cabin, Brazeau-Athabasca Forest

#### *Maintenance*

The work of moving the lower telephone line from the old lower trail to the newly located gravelled road continued, and was brought up to the Teepee Creek where there is wide diversion of approximately six miles. The work was discontinued here for the season and the two men were sent on trail maintenance for the remaining two weeks of the season. It is estimated that one month with the same crew will be required to complete this work next year to the end of the line at mile 62 since a considerable amount of preliminary work has been completed on this stretch.

Trail maintenance was our major undertaking last season, in fact, some secondary trails were converted to fair weather car roads with the use of the D6 Caterpillar tractor which was added to our equipment the previous year.

We concentrated on roads to lookouts to eliminate the loss of time which had been involved in packing radios, gas, aerial

masts, feed and provisions to the personnel on Athabaska and Adams Creek lookouts.

Three and a half miles of newly located road were constructed from Mile 4, lower road to the Athabaska lookout which can now be reached by car in fine weather, or power wagon at any time.

Fourteen miles of road were constructed to the Adams Creek lookout commencing at Mile 42.5 lower road. Very little work was required for several miles along the Berland River Flats but the last four miles up to the Adams Lookout ridge to the Lookout, to an elevation of 7,124 feet, was an engineering feat accomplished by W. L. Richardson, which is worthy of note. The four fords on the Berland River prevent passenger cars from using this road but a power wagon or truck can cross these fords at normal water.

The road to Hay River Cabin was also improved, making in all thirty miles of road sufficiently improved to permit truck travel where previously it was pack outfit or team and wagon.

#### *Trapping and Game*

Although licenses were issued to cover all trapping areas within this reserve, most trappers did not remain on their areas throughout the entire season, chiefly because of the low prices paid for furs. Several trappers report that marten are plentiful, particularly in the Smoky River District, and beaver are at least holding their own if not increasing.

Attempts were made by two rangers to eliminate predatory animals with the use of cyanide guns; one ranger set out six, but missed the wolf run and reported only getting one red fox. The other ranger is holding his until spring when he thinks the wolves, if once located, are more likely to remain in the one area more than is the case during the winter. If this occurs, he will then set out his guns.

Once again hunters reported a scarcity of big game during the hunting season. However, rangers reported having seen moose and elk on the river flats in good numbers during the winter. Caribou are reported to be returning to their old haunts. Discussing the disappearance of caribou with outfitters, they report plenty of caribou across the boundary of British Columbia.

A request was received last fall to report any cases of wood ticks found on big game. During the hunting season none were reported until spring, when Ranger Chapman of the Coalspur district, observed several moose which were badly infested with ticks.

## CLEARWATER FOREST RESERVE

*Report of Forest Superintendent, J. R. H. Hall*

### FOREST PROTECTION

During the 1949-1950 fiscal year, the field staff was at full strength with the exception of a district ranger and an assistant ranger for the new Saskatchewan district. It was decided not to fill these two positions because of uncertainty in the location of the new district headquarters and the lack of living accommodation.

Assistant Forest Superintendent W. J. Bloomberg was transferred to the Forest Inventory Branch in November, 1949, and during the same month J. D. Clark was transferred from Edmonton to fill the Assistant Forest Superintendent's position.

#### *Weather*

Snow melted rapidly during the first week in April and by April 7th, steep hills with a southerly exposure were clear of snow. At the end of April practically all snow had disappeared from the forest floor at the lower elevations in all districts. Precipitation was below normal during April and early May. May 15th was hot and dry, with a high north-westerly wind and low humidity. May 16th to July 10th, rain was intermittent but well distributed. July 11th to July 15th was hot and dry. Intermittent rains—light to heavy—were well distributed over the period July 16th to September 4th. Snow fell September 9th on all districts— $1\frac{1}{2}$  inches in the Brazeau West district to 10 inches in the Red Deer district. This snow quickly disappeared but saturated the forest floor. On October 5th, six to eight inches of snow fell. A heavy fall of snow on October 15th ended the fire season, with four to twelve inches of snow covering the forest floor.

Snow fall during the winter months was normal with an average of twenty-four to thirty-six inches of snow on the forest floor, December through March.

The average temperature during the winter months was several degrees below normal.

The Weather Bureau at Rocky Mountain House reports the following precipitation April, 1949, through March, 1950:

April .....	.45	inches
May .....	1.01	inches
June .....	1.27	inches
July .....	5.73	inches
August .....	.78	inches
September .....	.64	inches
October .....	1.72	inches
November .....	.21	inches
December .....	1.30	inches
January .....	.83	inches
February .....	.14	inches
March .....	.90	inches
<b>TOTAL .....</b>	<b>14.98</b>	<b>inches</b>

#### *Fire Season*

The fire hazard during April and early May was acute, with the balance of the season normal.

The first lightning-struck fire occurred on May 15th, and started our worst fire of the season. Fires were also started by lightning during June, July, August and September. Eight fires occurred during the season and of these seven were started by lightning.

#### *Fire Detection*

There was no change in the method of fire detection. Look-outmen and telephone operators were at their posts before the fire season started and went off duty after the forest floor was covered with snow in November.

### FOREST ADMINISTRATION

#### *Timber*

Timber business increased over last year.

Below are listed the transactions conducted during the fiscal year:

<b>TIMBER SALES</b>	
Number of active operations .....	15
Number not active .....	2
Number of sales cancelled .....	2
Lumber, f.b.m. ....	7,940,180
Railway ties (pieces) .....	39,566
Piling, lineal feet .....	NIL
Mining timber, green, lineal ft. ....	474,519
Mining timber, dry, lineal ft. ....	154,507
Lagging, dry, lineal ft. ....	NIL
Telephone poles (pieces) .....	5
Poles, power line (pieces) .....	NIL
Rails, dry (pieces) .....	7,807
Lath .....	NIL
Corral poles (pieces) .....	12
Fuelwood, cords .....	2
Timber dues collected .....	\$53,450.25

<b>SPECIAL TIMBER PERMITS</b>	
Number issued .....	1
Lumber, f.b.m. ....	134,913
Dues included in total above.	

<b>TIMBER PERMITS</b>	
Number of permits issued .....	40
Of these, 11 were cutting permits.	
Dues collected .....	\$2,359.66
<b>Green—</b>	
Fence posts, pine (pieces) .....	26
Fence rails, pine (pieces) .....	132
Mining timber, lineal ft., Sw and Pl....	70,532
Piling, spruce, lineal ft. ....	340
<b>Dry—</b>	
Fence posts, tamarac (pieces) .....	5,754
Fence rails, spruce and pine (pieces) .....	1,200
Fuelwood, mixed cords .....	57
Mining timbers, spruce and pine, lineal ft. ....	340,000
Piling, dry tamarac, lineal ft. ....	4,000

### USES

#### *Oil*

The Ram River Oils Company No. 3 well is still in operation but little drilling progress was made during this year.

#### MISCELLANEOUS USE PERMITS

The following new uses were authorized during the year:

A. Eskeson	Haul road .....	Parts Secs. 8, 17, 18, 19 and 30-31-8-W5M.
Saunders Stock Assn.	Pasture .....	Parts Sec. 19-40-14 and Sec. 24-40-13-W5M.
A. Eskeson	Haul road .....	Boundary gate to eastern limit of T.S. 488.
J. S. Murray	Haul road .....	East boundary of reserve to east boundary of T.S. 510.
Nordegg Fish & Game Assn.	Rifle range .....	Lsd 9 of Sec. 27-40-15-W5M.

A. J. & R. G. Browning	Drift fence .....	N.E 1/4 25-34-10-W5M.
S. McLeod	Drift fence .....	Lsd 13 and 14, Sec. 21-34-8-W5M.
S. McLeod	Pasture fence .....	Lsd 10, Sec. 1-34-9-W5M enclosing 7 acres.
Chungo Oil Holdings	Camp site .....	Parts Lsd's 9 and 16 Sec. 7, and Lsd's 12 and 13 Sec. 8-43-17-W5M.

### GRAZING

There was an abundance of feed on all districts during the entire grazing season.

Snowfall was normal. Very few "chinooks" occurred to crust the snow. Stock wintered well and losses were light.

Listed below are the numbers of stock grazed during the past twelve months:

Total number of stock grazed under permit .....	1098
Total number of horses grazed under permit .....	478
Total number of cattle grazed under permit .....	620
Total number of sheep grazed under permit .....	NIL
Total number of permittees .....	63
Average number of stock per permit .....	17.4

Collections by months are shown below:

April .....	\$505.86	October .....	\$173.95
May .....	358.60	November .....	253.90
June .....	118.30	December .....	NIL
July .....	93.60	January .....	19.30
August .....	20.70	February .....	132.05
September .....	133.11	March .....	758.14
TOTAL .....	\$2,562.51		

### IMPROVEMENTS

During the period covered by this report, rangers spent 1,067½ man-days on new construction work and 898 man-days on maintenance work.



Nordegg Ranger Station House, Clearwater Forest

Work was carried out on 17 new construction projects:

Barns .....	1	Implement sheds .....	1
Cabins .....	1	Roads .....	3
Cottages .....	1	Stable and storehouse .....	1
Entrance Gates .....	3	Telephone lines .....	1
Fences .....	1	Trails .....	1
Houses .....	2	Water Supplies .....	1
TOTAL .....	17		

### GAME

No heavy losses in the game population have been reported, and animals came through the winter in good shape.

Predators are still taking a heavy toll of big game animals in the Brazeau East and Brazeau West districts. Reports are conflicting, but indications are that the wolf population is on the decrease.

### RECREATION

Again there was an increase in the number of campers. The majority of these campers travelled in the Red Deer and Brazeau West districts.

There was a large decrease in the number of American hunters.

A total of 2,231 permits for travelling, covering 6,574 persons, was issued.

### FISH

A total of 321 seasonal licenses and 48 limited licenses was issued.

Fishing was the best in years and the average daily catch was above normal.

Practically all creeks were frozen to the bottom during the past winter, but losses were light.

Numerous beaver dams which are well distributed along creeks prevented winter killing of a large number of fish.

### TRAVEL

The following mileage was travelled by personnel of the Clearwater forest during the period under review:

Mode of Travel	Mileage
Car .....	25,249
Truck .....	57,019
Speeder .....	965
Train .....	1,708
Jeep .....	70
Saddle Horse .....	14,217
Team .....	940
Foot .....	3,384
Bus .....	357
Tractor .....	1,680
TOTAL .....	105,589

### CROWSNEST FOREST RESERVE

*Report of Forest Superintendent—F. N. Lind*

### FOREWORD

Following the separation of the Crowsnest-Bow River forest into the Bow River and Crowsnest forests, headquarters office space was rented in Blairmore. Office furniture was taken to the new headquarters from Calgary early in June. The headquarters staff moved permanently to Blairmore on June 13th.

Earlier in the year Mr. Alexander had arranged the purchase of building lots in the West Canadian Collieries Townsite in Blairmore but the proposed office, garage and warehouse were not built during the year due to building contract difficulties.

The production statements to follow are for the period June 1, 1949, to March 31, 1950, unless otherwise stated, as the information for April and May are in the Bow River Report.

### FOREST PROTECTION

The Forest Reserve staff consisted of the following:

- 1 Forest superintendent
- 1 Assistant Forest superintendent
- 1 Headquarters ranger (with a district)
- 1 Stenographer
- 1 Forest clerk
- 6 District Rangers
- 5 Assistant rangers
- 3 Lookout men

#### (a) *Fire Season*

An early spring, together with a great ground absorption of melting snow, made the spring run-off inconspicuous. A hazard developed on the west side of the Porcupine Hills in early May, but later in the month rain and snow came to reduce the hazard.

Exceptionally strong and variable winds were experienced during the summer together with rain showers. In September a long, dry period resulted in a serious dry grass situation which was abruptly changed in October with a general snow fall.

#### (b) *Weather*

Following the summer weather, normal snow and rain came during October and November. In early December temperatures were above normal for approximately three weeks. A very severe period followed from December 20 to February 4 with exceptional snow falls and very low temperatures. East winds blew steadily for a month.

In February the wind changed to the west resulting in warm weather and clear skies for approximately a month. Snow followed in March to build a quantity well above normal for this area.

#### (c) *Fire Prevention*

The ranger staff continued their contacts with the public stressing care with fire. New posters were placed throughout the reserve, some being of the new fluorescent paint design. The Canadian Forestry Association conducted an educational tour of motion pictures and lectures in the towns and villages, while the commercial radio stations carried many short announcements to warn the public to be careful with fires, matches and burning tobaccos.

**(d) Fire Detection**

Three lookouts were operated during dry weather and excellent co-operation was received from forest users in reporting fires.

**(e) Fire Suppression**

Seventeen fires occurred during the year, nine being inside the reserve and eight outside. Eleven fires were Class A, three Class B and three Class C, resulting in 130 acres burned inside the forest reserve and 55 acres outside. Seventy-six acres supported merchantable timber, 32 acres young growth, seventy-six acres non-forested and fifty-five acres private range land.

Timber destroyed was 450,000 FBM and 460 cords valued at \$2,000. Outside the reserve property damage amounted to \$3,400.

The total suppression cost was \$560.00 of which ranger service was \$166.00.

The following changes in field staff took place in early summer.

*Headquarters Ranger and Crowlodge District*

Mr. Frew was transferred to Calgary and replaced by Mr. Freeman from the Castlemount District.

*Castlemount District*

Following Mr. Freeman's transfer to Coleman, Assistant Ranger Huth and Lookoutman Moss were moved north. Mr. Jones and Assistant Wallator arrived from the Bow River forest. Later in the season Lookoutman Gravelle was moved to the Livingstone District and Lookoutman Lambeth took his place.

*Headquarters Staff*

Assistant Superintendent Lind was transferred from the Brazeau-Athabasca forest to the position of Superintendent at Blairmore. Mr. O. K. Bradwell was appointed assistant superintendent and Mr. H. D. Watts as forest clerk. Miss McDavid joined the service as stenographer. Mr. Watts became ill early in 1950 and had to resign after a lengthy illness.

**(f) Fire Fighting Equipment**

The following equipment was procured:

- 10 Paramount Cub pumps
- 1 High pressure fog pump
- 4 Canvas relay tanks
- 18,500 feet fire hose

**FOREST ADMINISTRATION****(a) Timber**

The year began with 17 active timber sales, 7 of which were cancelled during the season. One sale by auction was held. Several timber areas were examined, the most important being the Dutch Creek Block. Under the leadership of Mr. Bloomberg, the Racehorse-Dutch Creek area was sampled in six weeks.

Timber sale revenue from June 1st amounted to \$28,759.95. The fiscal year production was as follows:

Green lumber .....	7,507,000 f.b.m.
Dry lumber .....	2,301,000 f.b.m.
Props .....	2,042,000 lineal feet
Fence posts .....	1,700 lineal feet
Fence rails .....	50 lineal feet
Fence pickets .....	9,900 lineal feet
Poles .....	2,500 lineal feet
Fuelwood .....	670 cords

The above production was recorded at the reserve office to which should be added production from Timber Berth 80 which amounted to 7,031,000 FBM green and 70,000 FBM dry timber.

The timber permit business was active resulting in revenue of \$1,813.01 from the following products on 100 permits.

Green lumber .....	50,000 f.b.m.
Dry lumber .....	90,000 f.b.m.
Props .....	212,300 lineal feet
Fence posts .....	10,900 lineal feet
Fence rails .....	91,800 lineal feet
Fence pickets .....	300 lineal feet
Poles .....	3,900 lineal feet
Fuelwood .....	150 cords
Piling .....	2,290 lineal feet

#### (b) Grazing

The demand for range remained great and permits were granted for the following stock:

Cattle .....	13,356 head
Horses .....	429 head
Sheep .....	2,641 head

Revenue resulting from the Crowsnest headquarters permits amounted to \$11,211.68. Thirty-one grazing divisions were utilized but most of the Crowsnest Pass was not used. Losses of stock were light during the season in most areas.

Mr. Hansen of the Eastern Rockies Forest Conservation Board conducted a range survey over a large part of the reserve. The work will be completed in 1950 and management plans inaugurated in 1951.

#### (c) Grazing Uses

Forty-three use permits were issued for herder's cabins, drift fences, pastures and holding pastures resulting in a revenue of \$1,268.11.

#### (d) Miscellaneous Uses

The coal strip mining business expanded considerably during the year to bring the various number of use permits to 25. Some difficulty was had to obtain applications prior to opening up of pits and roads. The revenue from use permits amounted to \$585.75.

### IMPROVEMENTS—NEW CONSTRUCTION

Work was begun on the Castlemount cottage, the Coleman storehouse, the Gap bunkhouse and the Livingstone R.S. bathroom addition. Work proceeded slowly but by the end of the season all were over 75 per cent completed. On these projects 599 ranger man-days were used together with \$1,184.92 for material.

Approximately 50 miles of grade were built on the Crow trunk road north from Coleman and 9 miles of secondary road were completed from the Willow Creek ranger station to the Livingstone River. Building of five additional miles of grade and graveling will complete the northern portion of the Crow trunk road.

#### IMPROVEMENTS-MAINTENANCE

During the year 99 projects were maintained with 869 ranger man-days at ledger cost of \$628.85. The Willow Creek-Happy Valley telephone line was abandoned and sold.

STATEMENT OF REVENUE JUNE 1, 1949 - MARCH 31, 1950	
Timber sales .....	\$28,759.95
Timber permits .....	1,813.01
Grazing .....	11,211.68
Grazing uses .....	1,268.11
Miscellaneous uses .....	585.75
Game .....	200.00
Fishing .....	259.25
Maps .....	10.00
Miscellaneous .....	91.00
Total .....	<u>\$44,198.75</u>

The following mileage was travelled by personnel of the Crowsnest Forest Reserve during the fiscal year ending March 31st, 1950:

Mode of Transportation	Mileage
Truck and car .....	59,300
Horse .....	6,274
Foot .....	2,220
Bus .....	131
Train .....	500
Others .....	351
TOTAL .....	<u>68,836</u>

#### CYPRESS HILLS FOREST RESERVE

*Report of Ranger-in-Charge, R. T. Mackey*

#### FOREST PROTECTION

Snowfall was heavy during the winter of 1948-49 and the ground was so dry that it did not freeze during the winter. In spite of the heavy snowfall there was no spring run-off and sloughs did not fill with water. With the exception of a few heavy showers in June there were no spring rains in the Cypress Hills. An acute water shortage was experienced.

Lack of rain during the season held the fire hazard fairly high.

#### *Detection and Suppression*

As in previous years, fire detection has depended upon regular patrols and having telephone lines connected to reserve headquarters. The people in the areas adjacent to the reserve are very fire-conscious, making this a very effective means of detection.

#### FOREST ADMINISTRATION

The Cypress Hills forest, being situated in the centre of a settled district and accessible at all points, requires constant patrolling. At the present time we have not the necessary help to

do this work, and it is suggested that a patrol man be hired for the summer months.

#### *Timber*

The sale of timber was much greater than in the previous year.

The following shows details of timber cut and revenue collected:

Fence posts (pieces) .....	8,414
Fuelwood (cords) .....	204
Lumber (f.b.m.) .....	1,729
Round timbers (lineal ft.) .....	25,000
Revenue collected from timber .....	\$8,541.41

Mature spruce is scarce and the issuance of permits to cut this class of timber should soon be discontinued.

#### *Silvics*

All coniferous timber taken out of this forest is done under a system of selective cutting, and a large part of the staff's time is spent in marking timber. While our thinning programme leaves a lot to be desired, it is better than cutting to a size, which in most of our timber would amount to clean cutting.

#### *Grazing*

Stock entering the reserve were in good condition and put on a fair amount of weight during the grazing season. Most of the cattle were taken off the reserve early in September. The few cattle remaining until late fall were in fairly good condition. Losses were very light.

The grazing divisions were stocked to full capacity. During the year, 3,237 cattle and 147 horses were grazed under permit.

#### *Miscellaneous Uses*

A number of ranchers and farmers adjacent to the reserve rented watering and feeding grounds and also pasture land on the reserve. These uses are held under yearly permit.

Following is a statement of permits issued and revenue collected:

	No. of Permits	Revenue Collected
Timber permits .....	195	\$8,541.41
Grazing permits .....	61	6,078.80
Miscellaneous use permits .....	10	274.50
Totals .....	266	\$9,894.71

### IMPROVEMENTS

During the period covered by this report rangers spent 35½ man-days on new construction work and 95 man-days on maintenance.

Work was carried out on four new construction projects:

Telephone lines .....	1
Cabins .....	1
Fire-guard roads .....	1
Roads .....	1

### PERSONNEL

There has been no change in personnel since the last report.

### GAME

Beaver are still increasing and no great decrease in the number of deer has been noted.

### RECREATION

Elkwater Lake Park is still the centre of tourist attraction in this district and the number of campers and fishermen using the resort increased from last year.

### TRAVEL

The following mileage was travelled by personnel of the Cypress Hill Forest during the period under review:

Mode of Transportation	Miles
Truck .....	14,275
Private car .....	834
Saddle horse .....	1,791
Tractor .....	566
Team .....	137
Walked .....	267
Total .....	17,870

## Fish and Game Administration

### REPORT OF THE FISH AND GAME COMMISSIONER

*E. S. Huestis*

During the fiscal year 1949-50 the fish and game branches of the department continued their co-operation with other departments of the government, with other governments throughout the Dominion of Canada and the United States and with fish and game associations within and outside our province.

The most important meeting from the standpoint of general wildlife conservation was the annual meeting of Dominion and Provincial Wildlife Officials held on June 1st, 2nd and 3rd, 1949, in Ottawa. At this meeting the ten provinces were represented, together with the Dominion Wildlife Service and many other federal departments interested in or related to the problems of wildlife conservation.

We were fortunate during the fiscal year to have the 39th annual meeting of the International Association of Game, Fish and Conservation Commissioners held in Winnipeg on September 12th, 13th and 14th, 1949. It is very seldom that this association meets outside the United States, and it is a tribute to the wildlife administrations of the various provinces and the Dominion that they held one of their annual meetings in Canada, this being the third such meeting to be held in the Dominion. Attendance at this meeting gives one a broader viewpoint on the overall problems involved in the handling of fish and game, and one is able to obtain new ideas, not only from the papers and discussions in the general sessions of the conference, but also in the unofficial meetings held in the evenings with various individuals who are working with the same problems under similar conditions. We were fortunate in being able to have four members of our staff attend this very important meeting. One of the papers on the programme was allocated to the Province of Alberta and dealt with co-operation in game management as between the provinces of Canada and the states of the Union.

The 21st annual convention of the Alberta Fish and Game Association was held in the Palliser Hotel on February 3rd and 4th, 1950, where a report was given to the delegates. This meeting is important to the fish and game branches of the department as we are able to obtain the views of many men from any parts of the province on wildlife control and conservation measures.

This convention was followed by a meeting of the Western Canada-Yukon Council, at which were representatives from the four western provinces and the Yukon. Here problems affecting the province of Alberta go beyond the boundaries thereof and are discussed and recommendations made as to their solution.

Other meetings of interest attended during the year included the Western Stock Growers' Association convention at Calgary

## DEPARTMENT OF LANDS AND FORESTS

and a meeting of the Lake Level Stabilization Committee with representatives of the Department of Water Resources and Irrigation and this department sitting down with Ducks Unlimited, with whom many of these projects are worked out. This latter body is controlling a very important program of water stabilization throughout Alberta, holding water levels on lakes and sloughs, not only for the protection of migratory birds, muskrats and beaver, but also to maintain the water table in the area.

Two meetings of the Advisory Council on fish and game were held during the year. On June 14th, 1949, the Council met to discuss seasons and bag limits on migratory and upland birds and to finalize on regulations to govern the taking of big game, and also to discuss other important matters. On March 9th, 1950, another meeting was held to discuss fishery regulations and to review proposed big game regulations for 1950-51 so that non-resident hunters could be advised of the probable length of season and bag limits.

This year the Advisory Council was increased in size by the inclusion of Mr. Rufe Neighbor representing the Outfitters' Association, and Mr. D. W. Miller representing the Alberta Provincial Trappers' Association. The same representatives of the Alberta Fish and Game Association, the Indians, the farmers, the University and the department were in attendance as in the previous year.

The annual migratory waterfowl survey was conducted this year in conjunction with the United States Fish and Wildlife Service, and for the first time the United States and our own men were joined by a representative of the Dominion Wildlife Service. It is very desirable that these surveys of migratory birds be conducted jointly in view of the fact that the regulations for migratory birds are set up under a federal act in collaboration with wildlife officials in Washington.

In addition to the annual waterfowl survey, an upland bird survey was inaugurated for the first time. We were fortunate in securing two young men from the University of Alberta who were thoroughly trained in this type of work, and a very comprehensive survey was completed in certain areas. It was impossible for two men to cover the entire province but the more important areas were well covered.

During the year activities were continued in the transfer of big game animals from Elk Island Park, two loads of twenty-one elk being transported to the Whitecourt area in March, 1950, and six moose to the Olds district. During the same month action was taken to corral elk in the Canmore area where these animals are in good supply, and transport them by truck to the Elbow River Valley within the Bow River Forest Reserve. A total of fifty elk were moved. Both of these operations were carried out in co-operation with the Alberta Fish and Game Association, and in the case of transfer of elk from Canmore to the Elbow River Valley the Calgary Fish and Game Association took a very active part.



Transfer of Elk—Canmore District

The operation of the pheasant rearing station at Brooks was not as successful as in some of the previous years. It was unfortunate that there was opposition from certain interests in the Eastern Irrigation District to the collection of eggs and we had difficulty in obtaining a sufficient quantity at the price we had been paying for some years, namely, two cents each. As a result of this it was necessary for us to raise the price to four cents, when we obtained sufficient to fill our incubator. In addition we were able to assist the province of Saskatchewan by shipping them some 4,000 eggs. However, the delay encountered in securing the eggs had a marked effect on our incubation and the number of eggs hatched amounted to slightly over 53 per cent, whereas in previous years we had obtained a much higher percentage. Twelve-week old birds were shipped to eleven different points in the province selected by a committee appointed by the Alberta Fish and Game Association and approved by this office.

The principal changes in game regulations for 1949 were as follows:

The season on sheep and goat was reduced to one month, allowing for the shooting of one of either animal.

The season on deer, moose and elk was also reduced to a period of one month, and one of either of these animals might be taken. To this was added either a grizzly, black, brown or cinnamon bear.

In addition to this it was necessary to restrict the areas in which a special license could be secured for the taking of deer, moose or elk during the sheep and goat season. The only area open for this purpose during 1949 was in the Athabasca forest where the big game population was in good supply.

A short antelope season was allowed in the southeast corner of the province and the same area, bag limit and season were in effect in the province of Saskatchewan immediately adjoining.

For the first time the plugging of guns, both automatic and pump, was required for the taking of upland birds. In 1948 the plugging of guns had been required for the taking of migratory birds and in 1949 was enlarged to cover the taking of all birds. It is now legal for an automatic to be used in the province, but both automatic and pump guns must be plugged to a maximum of three shells.

For the first time an effort was made to conserve geese flying through Alberta on their usual migration southward and to allow them a resting place within the province so that they would stay with us for a short time. To do this the shooting of geese was prohibited within one-half mile of Sullivan Lake, a lake which attracts many geese on their southward movement.

Early in the spring of 1950 a test case was taken against the Indians of the Saddle Lake Indian Reserve for the shooting of female deer, moose and elk in the Edson district. The investigation of this case showed that during the period January 17th to February 18th five Indians from this agency took 4 male, 5 female and one calf of the elk, deer and moose species. From the period February 10th to March 2nd thirteen Indians took 10 male, 10 female and 3 calves of the same species. As a result of these investigations a prosecution was entered against these Indians. The results of the case were not known at the end of the fiscal year.

The Alberta Fish and Game Association are to be congratulated on carrying on the annual crow and magpie campaign for which the department pays five cents for each bird taken. The various associations turned in 49,897 crows and 86,921 magpies for a grand total of 136,818 birds. The winners of the competition were the Red Deer, Calgary and Innisfail associations, placing first, second and third respectively.

The coyote is becoming the most prevalent predator as far as Alberta is concerned and a campaign was organized against these animals. During the year 26 game officers were issued sodium cyanide guns, known as coyote getters, to be used in their districts for the taking of coyotes. The Setting of Poisons Act was amended in order to allow farmers to use poison within the confines of their own fenced land for the taking of coyotes and wolves, and in addition the department carried on a campaign, in conjunction with certain municipalities and livestock associations, using aircraft in the shooting of coyotes. The aircraft campaign accounted for 2,497 coyotes in six different districts of the province. It is interesting to note that the taking of coyotes

by aircraft was so spectacular as to have the National Film Board take a movie film of this operation which was distributed throughout Canada, the United States, South America and Europe.

One of the more important occurrences during the fiscal year was the setting up of new regulations under The Fish Dealers' Act to improve the packing, handling and processing of our commercial fish. It was the desire of the department that everything be done to improve the quality of fish coming from lakes throughout Alberta and very strict regulations were set up to improve the packing houses, the vehicles used in transportation and the containers in which the fish were packed. Details and instructions went out to all fish buyers who process and handle fish after it is sold to them by the fishermen, and the Fisheries staff are doing an excellent job of putting these regulations into effect.

The fishery regulations were changed to limit domestic fishing by the use of nets on lakes south of Township 63. At the same time it was necessary to limit fishing by Indians with nets in the same area to one day per week, which it was considered would allow any Indian family to supply its wants in conjunction with game that they are able to take. It was felt that the area north of Township 62 might be considered as the district in which people were dependent on fish and game for their sustenance, and as a result no restrictions were placed on this area.

For the past few years forward steps have been taken in the handling of the inspection of whitefish being shipped out of this province, particularly to the United States. In October, 1949, a meeting of the Advisory Council on the control of whitefish infestation was held at Saskatoon which was attended by members of the Dominion Department of Fisheries, the Fisheries Research Station at Winnipeg, and the provinces of Ontario, Manitoba, Saskatchewan and Alberta.

It had been hoped that the new Fish Inspection Act and regulations thereunder would be imposed during the latter part of 1949 or at the latest, in the spring of 1950. However, it was decided by the federal authorities that the change in regulations was somewhat drastic and as a result a period would be allowed for the trade to adjust itself to the new Fish Inspection Regulations before they were put into force.

There was only one change in the Fish and Game personnel throughout the year and that was the resignation of Mr. Them Kjar who was for some years the game inspector at Calgary. He resigned on August 18, 1949, to accept a position with the Dominion Government in the Yukon.

Our thanks are due to many publicity agencies for their assistance in publicizing wildlife conservation throughout the province. The press and radio have done an excellent job in this connection and this has been augmented by the assistance of the Alberta Fish and Game Association in their educational pro-

gramme amongst their local associations. We would also like to thank the Calgary Brewery and Sick's Brewery for their very fine series of wildlife posters throughout the province.

In concluding this report an appeal is being made to the sportsmen. If the sportsmen will abide by the regulations which are put into effect for the conservation of wildlife and are prepared to see that their neighbors do likewise, the problem of law enforcement as it relates to fish and game will be a very easy one. Each sportsman should feel that it is his responsibility to see that the regulations are adhered to in order to perpetuate the supply of wildlife in our province.

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#### GAME BRANCH

##### Report of Game Superintendent, D. E. Forsland

The statistics of the Game Branch for the fiscal year ending March 31, 1950, very clearly show that considerable progress has been made during the fiscal year under review not only from the point of revenue collected by the Department but from the apparent improvement of the conditions related to our game, both big game and game birds. For the last two or three years there has been a decided upward trend in the supply of our game birds, both migratory and upland. The increase in the bird population is particularly noticeable in our upland birds. It is apparent that the cycle is on an upward trend, and permitted the Game Branch to declare an open season on all species of game birds found in our province.

The populations of big game, however, have not shown the desired improvement. The decline in moose and caribou is very noticeable, and it became necessary for the Department to have a closed season for the taking and killing of caribou, until such time as the reasons for the disappearance of our caribou is better understood. There are many theories advanced for the decline of our moose and caribou populations. Undoubtedly there are several contributory factors to this decline, one being undoubtedly the prevalence of timber wolves in our big game areas, particularly that part of the forest reserve adjacent to the National Park.

In regards to our fur trade, the fiscal year under review shows a great similarity to the fiscal year ending March 31st, 1949. Long-haired furs such as foxes, coyotes, timber wolves, lynx, etc., are still on the market, and most fur dealers complain that it is impossible to sell this type of fur. In the spring of 1950 there was also a slight decline in the average price of some of the more popular furs such as mink, muskrat, and squirrel, but the over-all picture for the fiscal year shows a great similarity in the prices of the fur taken as well as in the number of pelts produced. The number of pelts taken during the fiscal year shows a reduction of 584,221 pelts. The reduction in the number of pelts is about evenly distributed throughout the various species.

The following is a more concise review of the situation dealing with the various phases of the work done by the Game Branch and the conditions of our game and fur resources as they existed during the fiscal year ending March 31st, 1950:—

### BIG GAME

As mentioned at the beginning of this annual report, there is a decline in the moose and caribou population. This decline has been noticeable during the last three or four years. Most other big game such as Rocky Mountain bighorn sheep and mountain goat seem to be holding their own very well and as a matter of fact the mountain goat shows a steady increase. The reports coming into the Game Branch office from guides, outfitters, and non-resident hunters definitely indicate that today we have more mountain goat than we have had in recent years.

#### *Bighorn Sheep*

For several years past, reports to the Game Branch have indicated that Rocky Mountain bighorn sheep were not as prevalent as formerly, and sheep seen by hunters and outfitters were mostly young animals, and not suitable as big game trophies. The reports brought into the Game Branch prior to the opening of the season on bighorn sheep in the fall of 1949 indicated an improvement in this situation. The guides and outfitters were particularly emphatic in their statement that bighorn sheep were more prevalent than previously, and in view of the reports received, an open season was declared on bighorn sheep.

During the open season in the fall of 1949, 37 mountain sheep were taken by non-resident hunters as compared with 48 mountain sheep taken the year previous. This reduction in the number of bighorn sheep taken by no means implies that there were fewer animals available to the hunter. The difference in the number of animals taken can be found in the fact that during this fiscal year only 44 non-resident special big game licenses were sold, as compared to the 83 non-resident big game licenses sold during the previous fiscal year.

In addition to the smaller number of non-resident hunters, consideration must be given to the fact that the open season for bighorn sheep and mountain goat during the fall of 1949 was reduced to one month, whereas in previous years the open season on Rocky Mountain bighorn sheep and mountain goat used to be from the 1st of September until the 31st day of October.

Only non-resident hunters have been mentioned in connection with the hunting of bighorn sheep, because this animal is very highly prized by non-resident hunters as a trophy. It is not hunted very extensively by resident hunters and very few Rocky Mountain bighorn sheep are taken by Alberta residents.

#### *Mountain Goat*

Reports obtained from most available sources such as guides, outfitters, non-resident hunters, forestry personnel, and trappers show that the goat population is easily holding its own



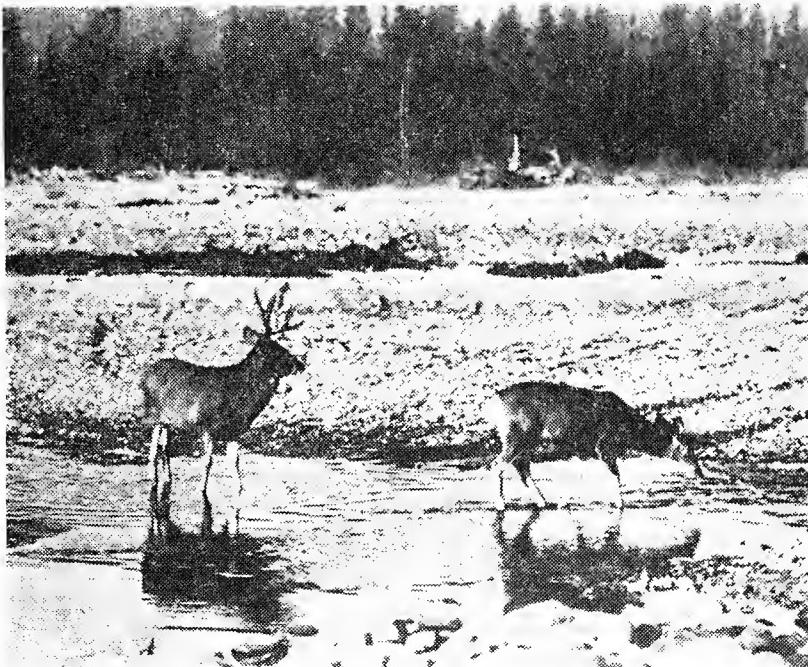
Mountain Goats—Athabasca Forest

and if anything, on the increase. This condition is quite easily understood. The animal is not hunted to any great extent by resident hunters; it is mostly to be considered as a non-resident hunting trophy. Owing to the inaccessible places frequented by these animals and the apparent ability of these animals to evade predators, this species of big game animal has been able to survive and increase from year to year.

#### *Deer*

It is rather difficult to estimate the situation as regards the supply of deer in the province. During the fall of 1949 an open season was declared on deer throughout the province. This policy of opening the deer season throughout the province is quite a new experiment in Alberta. For many years there has been no open season on deer in that part of the province lying to the east of No. 2 Highway from Edmonton to the U.S. border and to the south of the North Saskatchewan River from Edmonton to the Saskatchewan-Alberta interprovincial boundary. It was felt, however, by the Game Branch and the Advisory Committee, that it would be advisable to open the season throughout the province on deer in order to relieve the hunting pressure which otherwise would be present in the foothills and forested regions of the province. There is no doubt but that the open season in that area lying east of No. 2 Highway greatly reduced the number of hunters going into the foothills to hunt deer. Hunters able to obtain deer near their homes did so. The deer population in the foothills

area and on the forest reserves has not shown the increase in numbers which could be expected and there is an indication that the supply of deer in the province is gradually dwindling and approaching a condition which will need watching. Here again is a possibility that wolf predacity plays a big role in cutting down the annual increase of deer.



Mule Deer

### *Elk*

It is gratifying to notice the great improvement which has taken place in the supply of elk in this province. Not so many years ago elk was extremely scarce, and the few remaining elk in the province, were contained in the then existing Elk Preserve located between the Pembina and Brazeau Rivers. Today the situation is quite different. The Elk Preserve is discontinued and there are large numbers of elk throughout the foothills, from the Athabasca River in the north to the international boundary in the south. There are several large herds of elk ranging on the Waterton Lakes National Park as well as on the Waterton-Carbondale Game Preserve. Elk in the south-west corner of the province cause considerable trouble by destroying farmers' and ranchers' haystacks during the early spring. Frequent severe storms drive the animals out of their winter pasture into farm and ranch lands adjacent to the Waterton National Park and the Game Preserve.

Through the co-operation of the Dominion Government Parks Branch the province was able to obtain from Elk Island

Park some of their surplus elk, and during the months of February and March, 1950, the Game Branch moved from Elk Island Park 10 male and 12 female elk. These elk were moved by truck into the district west of Whitecourt, and from all reports received, the animals are apparently doing very well.

#### Moose

All reports received in connection with the moose population tend to show a generally slight decrease in the number of moose in the province. Numerous cow moose, without calves, have been sighted by hunters and it would appear from the reports that there are a considerable number of dry moose cows. Many areas where moose used to be plentiful, such as the Rocky Mountain House district, report an almost entire lack of moose. However, the moose have gradually spread either way into that part of the province lying south of the Calgary-Banff Highway, and today, moose can be found all along the foothills as far south as Pincher Creek.



Moose—Athabasca District

Numerous theories have been advanced as to the reason for the gradual decline in the moose population. The most generally accepted theory is that timber wolves cause a great loss of moose calves while the calves are still very young. Other theories are the prevalence of diseases and various infestations by parasites such as the moose tick and tape worm. Whatever may be the reason for the decline, and there are undoubtedly many other reasons besides the hunting of moose, it may become necessary

to close the open season on moose until such time as a more complete study of the situation is possible.

During the month of February the Game Branch obtained from Elk Island Park a supply of 5 male and 1 female moose. These animals were shipped by truck into the district west of Olds.

#### *Caribou*

During the fiscal year under review, the hunting season for caribou was closed. Investigations made by the department clearly indicated that the season should be closed. All outfitters, guides, and forestry personnel concurred in the department's findings, that the woodland caribou had practically disappeared from their old feeding grounds in the area immediately north of the Jasper National Park. Whatever the reason may be for the disappearance of the caribou, it was felt that the season must be closed until a further study of the situation has taken place. It is possible that the caribou simply migrated, in large numbers, from the Athabasca forest into British Columbia and perhaps there is no general cause for alarm, as the caribou may again return to the feeding grounds in Alberta. Such migrations are a common trait of the caribou and where you find numerous caribou one year, there may be none the next year.

There is no prospect for an open season in the near future as considerably more information must be obtained on this big game animal before an open season can again be declared.

#### *Antelope*

Only a comparatively small area in the south-east portion of the province was declared open to the hunting of antelope in the fall of 1949, the area comprising roughly Townships 1 to 7 inclusive, and Ranges 1 to 10 inclusive, West of the Fourth Meridian. This reduction in the area set aside for an open season was found necessary owing to the decreased number of antelope in the province, the antelope population still showing the effect of the very bad winter of 1947 at which time our antelope population was greatly reduced.

#### *Bear*

In the area lying south of the Medicine Hat Branch of the Canadian Pacific Railway grizzly bear is considered a predator and may be shot at any time of the year by a resident of the province and without a license; in the remainder of the province a license must be obtained to take grizzly bear.

A black or brown bear may be taken at any time of the year and without a license except within the limits of the Rocky Mountain Forest Reserve.

### MIGRATORY GAME BIRDS

Very dry weather in the fall of 1948 and in the early spring of 1949 was responsible for a very small spring run-off. Many

of the shallow lakes and sloughs in the southern part of the province were dry and this had a tendency to reduce the number of ducks nesting in the prairie regions. However, the picture gradually changed owing to the rains during June and July and a very good hatch was reported throughout the province.

The migratory birds population during 1949 was concentrated in that part of the province north of Edmonton, particularly in the Athabasca delta and Lake Claire marshes in northern Alberta. Throughout the northern portion water conditions were excellent and the number of birds which migrated into the north in the spring was, if anything, larger than in previous years. As was shown later, there was an exceptionally heavy crop of ducks. The geese hatch was also exceptionally good. Most of the migratory birds left on their southern migration about the end of October, the main migration taking place from October 23rd to October 30th. Owing to a very unusually mild and open fall, a number of ducks remained until quite late in the fall; some groups of ducks being reported in the Lesser Slave Lake, Grande Prairie, and Rocky Mountain areas as late as December. However, these birds finally left with the arrival of winter weather in December.

#### UPLAND GAME BIRDS

All species of upland game birds showed a remarkable recovery as mentioned in the early part of this report. It is evident that the upland game bird population is on an upward trend in the cycle of increase and decrease. The department took into consideration this steady upward increase of upland game birds and an open season was declared on practically all species of game birds. There was an open season throughout the province on sharp-tailed grouse, ruffed grouse, spruce partridge, Hungarian partridge, and ring-neck cock pheasants. There was also an open season on blue grouse in the south-western portion of the province.

Every indication is that upland game birds will be in good supply for at least another year or two before the usual decline in their numbers sets in.

#### ALBERTA FUR PRODUCTION

During the fiscal year under review Alberta produced 2,053,437 pelts from various kinds of wild fur-bearing animals. This number is exclusive of pelts produced by Alberta fur farms. The figure is 586,534 pelts less than the number of pelts taken during the season 1948-49. Most of the reduction occurred through fewer pelts being taken of: squirrels, muskrats, wild mink, ermine, and rabbits. There were 503,807 less squirrel skins produced than in the previous year, because of unfavorable weather conditions, and low prices. However, generally speaking, the fur production was very similar to the season 1948-49, both in volume and in the price obtained by the trapper for his fur.

The raw fur trade had a rather difficult year owing to the fluctuations and uncertainty in the price of raw fur. At the be-

ginning of the season, dealers were very uncertain as to what amount they would be able to pay for the fur. The raw fur market appeared glutted with certain types of fur such as foxes, coyotes, wolves, badgers, etc. Even lynx, which in the past years used to bring good prices, was considered unsaleable. The fur trade had to depend mainly on four types of fur for their operations, to wit, beaver, muskrats, squirrels, and weasels, these furs being, of course, in addition to the ranch-raised mink.

Later in the season, however, fur prices stabilized and the over-all picture for the fiscal year is very little different from the results of the season 1948-49. The total value of the wild fur produce in Alberta during the season 1949-50 was \$1,888,917.99 as compared with \$1,926,783.50 for the previous year.

#### REGISTERED TRAPLINES

During the fiscal year under review, the department issued 2,813 certificates for the registration of traplines. This constituted a reduction of 92 traplines abandoned or otherwise cancelled from the previous year. In the last few years, except for very slight fluctuations, the number of registered traplines has remained fairly constant in the neighborhood of 3,000 registered traplines of which approximately 800 are registered by Treaty Indians, the registration fee of \$10.00 per line being paid by the Dominion government on behalf of the Indians. All applications for renewal of traplines must be made prior to the 31st day of August in the year for which the trapline is to be registered and any trapper who has not made application by Sept. 30th will have to pay an additional \$10.00 for his registration. The levying of this extra fee for late applications to renew the trapline was to decrease the congestion in the issuing office occurring by trappers applying for their certificates only a few days prior to the opening dates of the trapping season.

#### PREDATORY CONTROL

As in previous years, the Alberta Fish and Game Association again carried out a program of payment of bounty for crows' and magpies' feet; they also paid bounty on hawks' and owls' feet of birds killed during the month of April. The funds for this campaign were supplied by the Department.

Bounty was paid on timber wolves and cougars killed throughout the year. The bounty being \$15.00 per timber wolf killed between the 1st day of April and the 30th day of September, and \$12.00 for those killed from October 1st to March 31st. The bounty on cougars was \$15.00 per cougar throughout the year.

#### GAME PRESERVES AND BIRD SANCTUARIES

One new game preserve was established north of the Wapiti River in Township 70 and Ranges 5 and 6, West of the 6th Meridian.

#### FUR FARMS

The only fur farms coming under the administration of the Game Branch are those established for the raising of beaver and

muskrats. The regulations governing this type of fur farm compels the fur farmer to enclose his fur farm with a beaver or muskrat-proof fence as the case may be, making the establishment of such fur farm an expensive undertaking. At the present time there are only 22 licensed fur farms in the province of which 10 farms are for the raising of beaver only; and 5 for raising both muskrats and beaver. All of these are located on privately owned land, as most of the water areas on unoccupied Crown lands, suitable for muskrat and beaver raising, are generally covered by registered traplines.

#### ENFORCEMENT OF THE GAME ACT AND GAME REGULATIONS

Responsibility for the enforcement of the game laws rests with the Game Branch and the game enforcement officers working under the direction of the Fish and Game Commissioner and the Game Superintendent. Some game officers are permanently employed by the department on enforcement work; others are ex-officio game guardians, such as for example, members of the Royal Canadian Mounted Police.

The game officer has many duties to perform and the area which he has under his supervision is, in most cases, exceedingly large. The game officer must have a considerable knowledge of a great variety of subjects, including law. He must understand the principles of game conservation and game management; he must have a better than average knowledge of all our furs, wild or ranned, in production, grading and value; he must have a thorough knowledge of court procedure to be able to distinguish between what is evidence and what is not evidence, and lastly he should be able to render an intelligent report to his superiors on any investigation or prosecution conducted by himself.

In connection with the enforcement work, mention must be made of the assistance rendered the Game Branch by the R.C.M.P. Our game officers are always welcome to call on any R.C.M.P. constable for assistance and he is always assured of courteous and valuable help whenever he requests such assistance from the force. The assistance rendered by the R.C.M.P. in our enforcement work is particularly valuable during the open season on game birds when a large number of motor vehicles are usually checked on our various highways and roads. Such checking of motor vehicles cannot be successfully carried out without their assistance.

The game officers are now supplied with a suitable and easily recognized uniform. They find the uniform a great advantage in their enforcement work, particularly when stopping and checking motor vehicles, searching private dwellings or other premises, and appearing in court with evidence. Undoubtedly the uniform makes the game officer's work much easier, more pleasant, and lends prestige to the service.

During the fiscal year 224 convictions were obtained for infractions of The Game Act and the various regulations. The number of convictions during the year 1948-49 was 235. It is

therefore very noticeable that over a period of years the number of convictions obtained under The Game Act and Game Regulations remains to a great extent constant. There is, as a rule, only a slight fluctuation in the number of convictions; also many of the convicted persons have been convicted in previous years or for more than one offence during the current year.

Most cases prosecuted in connection with illegal hunting or trapping in the province come under the classification of "illegal possession." It is, of course, considerably easier to prove in court that a person was in possession of big game, game birds, or fur taken in contravention of The Game Act and Regulations, than it is to prove illegal hunting. This is especially true when dealing with the hunting of game birds and to a lesser degree in the hunting of big game.

The greatest number of prosecutions in cases of illegal hunting of big game are in connection with residents who hunt for the purpose of obtaining food. Many of the smaller farmers and homesteaders in the big game areas will hunt big game out of season in order to obtain a supply of meat. It is very rare that a non-resident is caught hunting illegally; the fact that a non-resident hunter must be accompanied by a licensed guide prevents the illegal shooting of big game by a non-resident. In the past there have been a few cases when a guide has allowed a non-resident to take some prohibited animal such as a caribou or perhaps more than his bag limit, and in every instance the guide and outfitter have been prosecuted, and their licenses cancelled.

Four years ago the province instituted a system of affixing a metal seal to the antlers of every big game animal killed. When a hunter purchased a big game license, he received a seal, resembling the ordinary box-car seal used by the various railway companies, for every species of big game on which there was an open season. The seals had to be affixed to the antlers of the animal or on some other specifically prescribed portion of the carcass, immediately after such animal was killed. It was found necessary to institute this type of sealing system to prevent unscrupulous hunters taking more than their proper share of big game; for instance, a hunter would take a deer in one part of the province, transport it home and then go out again in another part of the province and obtain an additional deer. This type of poaching was very hard to control, because it was necessary to find the hunter in possession of more than his legal bag limit. After the introduction of these big game seals this practice has become, if not impossible, at least very difficult because now any big game which is found in transit without a seal affixed to the carcass can be promptly placed under seizure and an investigation made as to the legality of the killing of the animal.

Another measure of preventing illegal hunting which has proven very useful, is the placing of checking stations at strategic points. Hunters going back into cities and towns from the game country in the western part of the province must pass one or more of these checking stations, where an examination can be made of the contents of any vehicle suspected of carrying illegal

game. The value of such checking stations is apparent from the fact that some of our game officers discovered a truck carrying three cow elk and one cow moose. It is doubtful that this poacher would have been apprehended had his truck not been stopped and checked at one of these control stations.

From the foregoing it must be obvious that game law enforcement and conservation of our wildlife goes hand in hand. We cannot have effective wildlife conservation without adequate game law enforcement; one being dependent on the other. Both work towards the common goal, of more and better wildlife.

#### SUMMARY

The past year must be considered a very successful one from practically every point of view. There has been a decided and noticeable increase in all our species of game birds; big game, with the exception of moose, also appears to be holding their own. It is safe to say that our supply of big game is at least equal, if not better, than the supply existing a year ago. The attached statistics show that there has been a great increase in the sale of hunting licenses, particularly resident bird game and resident big game licenses.

A slight decline is shown in our wild fur production, but the amount realized by the trappers from the furs is only slightly less than last year. The Department, of course, has no control of the price realized by the trappers for their fur, but every indication is that the fur market is settling down and the low prices realized by the trapper a year ago will not be carried through our next trapping season. Prices are on the up-trend and trappers and fur buyers alike feel confident that as long as they have the assurance that a crop of fur will be available to the trade, prices will gradually readjust themselves. The supply and demand sets the price in the fur trade as it does with any other trade.

The success of the fiscal year now under review can perhaps be best judged from the fact that the total revenue to the Game Branch from all sources reached an all-time high of \$515,487.72, exceeding last year's revenue by \$177,367.56.

ALBERTA FUR PRODUCTION—SEASON 1949-50  
(WILD FUR)

	Total Number of Pelts	Average Value of Pelts	Total Value of Pelts
Badger .....	74	\$ 1.78	\$ 131.72
Beaver .....	8,082	19.44	157,114.08
Ermine .....	158,527	1.51	239,375.77
Fisher .....	9	28.62	257.58
Silver Fox .....	58	9.18	532.44
Red Fox .....	622	1.75	1,088.50
Cross Fox .....	326	1.50	815.00
White Fox .....	219	8.60	1,883.40
Blue Fox .....	1	18.00	18.00
Lynx .....	366	10.28	3,762.48
Marten .....	477	24.60	11,734.20
Mink .....	2,529	28.13	71,140.77
Muskrat .....	508,868	1.70	865,075.60
Otter .....	75	18.60	1,395.00
Jack Rabbit .....	6,783	.55	3,730.65
Bush Rabbit .....	81	.....	.....
Tame Rabbit .....	798	.....	.....
Skunk .....	451	.80	360.80
Squirrel .....	1,360,740	.88	517,081.20
Coyotes .....	5,152	2.50	12,880.00
Timber Wolf .....	68	6.85	465.80
Wolverine .....	10	7.50	75.00
Bear .....	19	.....	.....
			1,888,917.99

FISH AND GAME ADMINISTRATION

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GAME LICENSES—PERIOD APRIL 1st, 1949 to MARCH 31st, 1950

	Number of Licenses	Fee	Total Amount
Residents' bird game .....	34,829	\$ 2.50	\$87,072.50
Non-residents' (Canadian) bird game .....	460	5.00	2,300.00
Non-residents' (Non-Canadian) bird game .....	422	25.00	10,550.00
Residents' big game .....	15,279	5.00	75,395.00
Non-residents' big game .....	139	100.00	13,900.00
Permit to collect .....	23	Free	.....
Taxidermists' .....	7	5.00	35.00
Residents' special .....	14	5.00	70.00
Non-residents' special .....	44	25.00	1,100.00
Guide's (Class "A" and "B") .....	131	2.50	327.50
Guide's (Class "C") .....	27	1.00	27.00
Game farms .....	5	5.00	25.00
Outfitters' .....	49	Various	815.00
Non-residents' permit to export .....	77	Free	.....
Non-residents' permit to export .....	17	Various	645.00
Fur farmers .....	20	Various	168.00
Resident Trapper's .....	1,092	3.00	3,276.00
Permit to trap muskrats .....	1,258	3.00	3,804.00
Residents' special antelope .....	1,215	5.00	5,080.00
Non-residents' special antelope .....	8	50.00	400.00

BOUNTY ON TIMBER WOLVES AND COUGARS—SEASON 1949-50

459 Timber Wolves at \$15.00 each .....	\$5,885.00
235 Timber Wolves at \$12.00 each .....	3,420.00
35 Cougars at \$15.00 each .....	525.00

LICENSED ALBERTA FUR FARMS

Beaver .....	10
Muskrats and Beaver .....	5
Muskrats .....	7

TRAP-LINE REGISTRATIONS

Registered Trap-Lines, April 1st, 1949 to March 31st, 1950 .....	No.	Revenue
.....	2813	\$28,180.00

FUR DEALERS' LICENSES, ETC.

Resident fur dealer's licenses to carry on business in a city and elsewhere than in a city .....	350	\$3,500.00
Non-resident fur dealer's licenses to carry on business in the Province .....	0	DUV.UV
Resident travelling fur purchasing agent's licenses .....	23	575.00
Tanners' Licenses .....	2	20.00
Furriers' Licenses .....	15	150.00

FUR TAX REVENUE

Amount collected .....	\$119,927.40
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MUSKRAT AND BEAVER PERMITS ISSUED

	Number
Muskrat permits issued .....	329
Muskrats reported taken .....	31,043
Beaver permits issued .....	472
Beaver reported taken .....	2,073

BIG GAME ANIMALS KILLED BY NON-RESIDENT HUNTERS

	Number
Grizzly bear .....	12
Black bear .....	5
Deer .....	10
Elk .....	10
Moose .....	48
Mountain Goat .....	15
Mountain Sheep .....	37
Antelope .....	2

CONVICTIONS UNDER THE GAME ACT

Number of Convictions .....	224
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CONFISCATED FURS

Amount realized from the sale of confiscated fur during the period April 1st, 1949 to March 31st, 1950 .....	\$1,435.96
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## DEPARTMENT OF LANDS AND FORESTS

## GAME LAW VIOLATIONS FOR PERIOD APRIL 1st, 1949 TO MARCH 31st, 1950

Name	Address	Nature of Complaint
Abernathy, Victor, Rossington,	Shooting big game without a license; fined \$25.00 and costs.	
Adams, Orrin, Edberg,	Unlawfully trapping muskrats without required permit; fined \$10.00 and \$4.50 costs.	
Adrian, Fred, Rocky Mountain House,	Serving big game meat to crew at lumber camp; fined \$10.00 and costs.	
Algat, Wm. James, Stauffer,	Hunting big game without a license; fined \$50.00 and costs. Also hunting big game on Sunday; fined \$25.00 and costs.	
Asel, Eddie, Clyde,	Discharging shotgun from an automobile; fined \$10.00 and costs.	
Atwood, Richard, Raymond,	Hunting migratory birds without a license; fined \$5.00 and costs.	
Baker, Sherwood, Egremont,	Unlawfully shooting game birds; fined \$10.00 and costs.	
Beaver, Joseph, Desmarais,	Unlawfully in possession of muskrat pelts; fined \$25.00 and costs.	
Beckerjeck, Ronald, Stavely,	Shooting game birds out of season; fined \$15.00 and costs.	
Berg, Henning, Belvedere,	Unlawfully trapping fur-bearing animals; fined \$10.00 and costs.	
Berry, E. William, Innisfail,	Unlawfully in possession of muskrat pelts; fined \$20.00 and costs.	
Bigelow, Donald V., Taber,	Hunting antelope during closed season; fined \$50.00 and costs.	
Bigelow, Cyril V., Taber,	Hunting antelope during closed season; fined \$50.00 and costs.	
Blondheim, Francis, Evansburg,	Hunting game birds on Sunday; fined \$25.00 and costs.	
Bobryk, Mitrofan, Seba Beach,	Unlawfully in possession of big game; fined \$10.00 and costs.	
Boudreau, Pete, Vermilion,	Illegal possession of ducks; fined \$20.00 and costs.	
Brassard, Hector, Leduc,	Hunting game birds without a license; fined \$10.00 and costs. Also hunting game birds on Sunday; fined \$25.00 and costs.	
Bremner, A. J., 424-14th Ave. E., Calgary,	Discharging shotgun from vehicle; case dismissed.	
Brooks, Richard, Spirit River,	Carrying loaded firearm in vehicle; fined \$15.00 and costs.	
Bugbee, George D., Ricinus,	Selling parts of big game illegally; fined \$10.00 and costs of \$3.25.	
Calkins, Joe, Rocky Mountain House,	Unlawfully in possession of buck deer; fined \$15.00 and \$3.25 costs.	
Canadian Utilities Limited, Edmonton,	Unlawfully breaking and destroying beaver dams; fined \$10.50 and costs.	
Cardinal, Alexander, Whitecourt,	Unlawfully trapping muskrats on land without owner's consent; fined \$15.00 and costs.	
Cardinal, Peter, Calling Lake,	Hunting muskrats without license; fined \$25.00 and costs.	
Cardinal, Raymond, Fort Chipewyan,	Trapping without a license; fined \$10.00 and costs.	
Carr, Alvin, Newell Hotel, Brooks,	Acting as guide without necessary license; fined \$5.00 and costs.	
Carson, Frank, Sunset House,	Taking squirrels without a license; fined \$5.00 and costs.	
Cates, Allan M., Wildwood,	Hunting without a license; fined \$10.00 and costs.	
Cheecham, Joe, Anzac,	Gave false and misleading statement; fined \$50.00 and costs.	
Christie, Adam, Diamond City,	Hunting game birds during closed season; fined \$20.00 and costs.	
Cirankewitch, A., Trochu,	Carrying loaded rifle in an automobile; fined \$10.00 and costs.	
Clarke, Ronald, Lethbridge,	Carrying firearms in game preserve; no conviction but .22 Cal. Rifle seized by game officer.	
Clarke, Wm. John (Juvenile), Lethbridge,	Hunting on land without owner's consent; no conviction but rifle ordered confiscated to the Crown.	
Coburn, Wm., Yellowknife, N.W.T.,	Hunting game birds without a license; fined \$5.00 and costs.	
Cook, Everett, Calmar,	Hunting without game license; fined \$10.00 and costs. Also hunting birds on Sunday; fined \$25.00 and costs.	
Corriveau, Rosario, Girouxville,	Hunting moose during closed season; fined \$25.00 and \$4.50 costs.	
Coutney, Frank A., Lac La Biche,	Failed to keep true and accurate records in books supplied by the Dept. of all pelts trafficked in; fined \$25.00 and \$2.50 costs.	
Coutney, Romeo, Lac La Biche,	Keeping improper records; fined \$25.00 and \$4.50 costs.	
Cowley, Wm., Hanna,	Hunting game birds out of season; fined \$8.00 and costs.	
Crantz, Knute, Hythe,	Illegal possession of big game meat; fined \$20.00 and costs.	
Crawford, Robert, Edmonton,	Hunting from power boat; fined \$20.00 and costs.	
Cressman, Bud, Caroline,	Serving big game meat to crew at lumber camp; fined \$150.00 and costs.	
Crockford, Rod B., Medicine Hat,	Hunting on land without owner's consent; fined \$25.00 and costs.	
Cytko, Nick, Coleman,	Illegal possession of big game meat; fined \$75.00 and costs.	
Damery, Kenneth, Lac La Nonne,	Hunting game birds without a license; fined \$3.00 and costs.	
Davis, Donald, Vermilion,	Unlawfully trapping muskrats on lands not his own; fined \$21.50 and costs.	
Davis, Thomas H., Vermilion,	Unlawfully in possession of muskrat pelts; fined \$10.50 and \$3.50 costs.	
Dean, Maurice, Red Deer,	Hunting ducks with shotgun which had not been plugged; fined \$10.00 and costs.	
Deschambeau, Irvin, Lac La Biche,	Hunting game birds during closed season; fined \$10.00 and costs.	
Deschambeau, Marvin, Lac La Biche,	Hunting game birds during closed season; fined \$10.00 and costs.	
Desjarlais, Tommy, Peers,	Illegal possession of beaver and muskrat pelts; fined \$10.00 and costs.	
Deweese, Paul, Valhalla,	Illegal possession of moose meat; fined \$20.00 and costs.	

## FISH AND GAME ADMINISTRATION

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Name	Address	Nature of Complaint
Dickson, James, Alhambra, Illegally in possession of big game meat; fined \$75.00 and costs.		
Docherty, Abe, Alix, Hunting deer without a license; fined \$25.00 and costs.		
Dolon, James, Canmore, Unlawfully in possession of big game meat; fined \$75.00 and costs.		
Dumont, Alie, Edberg, In possession of flesh of female deer; fined \$50.00 and costs.		
Ellingsen, Gunnar, Longview, Carrying a loaded rifle in a car; fined \$5.00 and costs.		
Entz, John P., Crystal Lake, Trapping muskrats without being in possession of a permit; fined \$40.00 and costs.		
Estell, Earl Jr., Mirror, Unlawfully shooting ducks on Sunday; fined \$10.00 and costs.		
Euchuk, Peter, Shalaka, In possession of illegal muskrat pelts; fined \$15.00 and costs.		
Forestberg, Victor, Thorsby, Unlawfully in possession of beaver pelts; fined \$10.00 and costs; and trapping beaver illegally; fined \$20.00 and costs.		
Fox, Wm., Whitelaw, Hunting ducks without a license; fined \$10.00 and costs.		
Fuhr, Henry G., Illinois City, Ill., U.S.A., In possession of big game without proper export permit; fined \$10.00 and costs.		
Gallelli, A., 618-1st Ave. N.E., Calgary, Hunting within a game preserve, fined \$25.00 and costs; Also hunting game birds on Sunday; fined \$25.00 and costs.		
Gambler, Felix, Desmarais, Trapping muskrats on another person's registered trapline; fined \$15.00 and costs.		
Gambler, Frank, Desmarais, Trapping muskrats on another person's registered trapline; fined \$15.00 and costs.		
Gardner, G. E., Edmonton, Shooting from motor vehicle on highway; fined \$25.00 and costs.		
Garner, Vernon, Raymond, Hunting game birds without a license; fined \$5.00 and costs.		
Gerun, John, Halach, Unlawfully trapping muskrats; fined \$15.00 and costs.		
Gietz, Alfred, Pincher Creek, Illegal possession of big game; fined \$50.00 and costs.		
Gilbert, James, Medicine Hat, Hunting on land without owner's consent; fined \$25.00 and costs.		
Gillette, Ken, Red Deer, Unlawfully in possession of deer meat; fined \$50.00 and costs of \$4.25.		
Gillis, Lyle, Clyde, Discharging shotgun from automobile; fined \$10.00 and costs.		
Giraro, Jos., Prime, Codessa, Illegal possession of pelts of fur-bearing animals; fined \$10.00 and costs.		
Gleisner, Kenneth, Forestburg, Shooting geese within one-half mile of Sullivan Lake; fined \$10.00 and costs.		
Gough, Garry, Raymond, Hunting birds without license; fined \$5.00 and costs.		
Goulet, Johnny, Springburn, Unlawfully dealing in beaver pelts; fined \$10.00 and costs.		
Gray, Wm. H., Brooks, Hunting migratory birds (ducks) in closed season; fined \$10.00 and \$4.00 costs.		
Gregory, Stanley, G., Balmoral Hotel, Calgary, Illegal possession of game; fined \$25.00 and costs.		
Hamel, Jos., Bonnyville, Unlawfully selling elk meat in his butcher shop; fined \$25.00 and \$4.50 costs.		
Hammel, Timothy, Whitcha, Unlawfully hunting game; fined \$25.00 and costs.		
Hank, Charlie, Clyde, Discharging a shotgun from an automobile; fined \$10.00 and costs.		
Hayduk, Frank, Smoky Lake, Hunting game birds during closed season; fined \$15.00 and costs.		
Haynes, Harold, Red Deer, Unlawfully in possession of game birds; fined \$10.00 and costs.		
Hill, Fred, Turner Valley, Shooting female moose; fined \$15.00 and costs.		
Hill, Grant, Clyde, Discharging shotgun from an automobile; fined \$10.00 and costs.		
Hopf, Ralph, Tofield, Illegal possession of muskrat pelts; fined \$12.50 and costs; also unlawfully trapping muskrats on game preserve; fined \$12.00 and costs.		
Houle, Joseph, Desmarais, Trapping on another person's trapline; fined \$50.00 and costs.		
Humphrey, Dale, Delburne, Shooting from an automobile; fined \$10.00 and costs.		
Jackson, Mrs. G., Clairmont, Illegally exporting fur; fined \$10.00 and costs.		
Johnson, Arthur, Caroline, Feeding moose and deer meat to lumber crew; fined \$150.00 and costs.		
Kehoe, Charles, 2132-17th Ave. W., Calgary, Shooting Hungarian partridge during closed season; fined \$25.00 and costs.		
Keith, E. V., 718-2nd Ave. W., Calgary, Unlawfully hunting pheasants; fined \$10.00 and costs.		
King, V., Edmonton, Hunting game birds during closed season; fined \$25.00 and costs.		
Kjorlien, Glen, Greencourt, Attempting to shoot game birds out of season; fined \$10.00 and costs.		
Koehler, Wm., Donalda, Carrying loaded shotgun in motor vehicle; fined \$25.00 and costs.		
Kostyniuk, Paul, Lake Eliza, Unlawfully trapping muskrats; fined \$10.00 and costs.		
Krutzer, Joe, Waterways, Gave a false and misleading statement when applying for beaver permit; fined \$50.00 and costs.		
Laboucane, Pete, Lac La Biche, Hunting game birds without a license; fined \$10.00 and costs; also shooting game birds during closed season; fined \$10.00 and costs.		
Lafleur, Adrian, Grimshaw, Using unplugged shotgun; fined \$5.00 and costs. Also hunting ducks without a license; fined \$50.00 and costs.		
Lakusta, George, Hairy Hill, Unlawfully shooting muskrats; fined \$50.00 and costs.		
Lambert, Richard, Edson, Illegal possession of big game; fined \$50.00 and costs.		
Lapierre, Armand, St. Paul, Shooting game birds during closed season; fined \$10.00 and costs.		
Lastuka, George F., Wrentham, Exceeding bag limit of antelope, found in possession of five carcasses; fined \$125.00 and costs. Also hunting big game without a license; fined \$25.00 and costs.		
Lea, Gordon, Strachan, Serving moose and deer meat to crew at lumber camp; fined \$150.00 and costs.		

## DEPARTMENT OF LANDS AND FORESTS

Name	Address	Nature of Complaint
Lee, Alfred, Lawrey Gardens, Calgary, Hunting game birds during closed season; fined \$25.00 and costs.		
Lewis, Charlie, Clyde, Discharging a shotgun from an automobile; fined \$5.00 and costs.		
Lickiss, Newton, Retlaw, Shooting pheasants during closed season; fined \$15.00 and costs.		
Loch, A., Therien, Soliciting or trafficking in pelts of fur-bearing animals without required license; fined \$15.00 and \$12.00 costs.		
Look, Jack M., Lucky Strike, Hunting on posted land; fined \$20.00 and costs.		
Lukaks, Robert, Retlaw, Shooting game birds during closed season; fined \$15.00 and costs.		
Lund, Gordon E., 839-4th St. E., Prince Albert, Sask., Unlawfully buying parts of bear; fined \$10.00 and costs of \$8.25.		
Lutz, Ralph, Irvine, Unlawfully in possession of four antelope carcasses and one hind quarter of antelope; fined \$50.00 and costs.		
Lynch, Ross, Red Deer, Carrying loaded shotgun in automobile; fined \$10.00 and costs.		
Machum, Robert B., Priddis, Serving moose meat at logging camp; fined \$25.00 and \$4.00 costs.		
Marleau, Adolph, Cochrane, Hunting game birds on Sunday; fined \$25.00 and costs. Also shooting muskrats during closed season; fined \$50.00 and costs.		
Marshall, L. C., Stettler, Hunting game birds during closed season; fined \$20.00 and costs.		
Marteniuk, William, Edmonton, Hunting from power-boat; fined \$20.00 and costs.		
Martin, Harry, Warner, Hunting with a repeating shotgun which had not been plugged; fined \$5.00 and costs.		
Martineau, Arthur (Juvenile), Peace River, Shooting geese without a license; fined \$3.00 and costs.		
Matkin, DeVoe, Raymond, Illegal possession of deer carcass; fined \$100.00 and costs. Also in possession of doe deer carcass with distinctive evidence of sex removed; fined \$25.00 and costs.		
Mitchell, John, Lethbridge, Hunting game birds without a license; fined \$5.00 and costs.		
Morrison, J. J., Lethbridge, Hunting game birds with shotgun not properly plugged; fined \$15.00 and costs. Also hunting pheasants during closed season; fined \$5.00 and costs.		
Motz, John, Spondin, Selling shooting rights; fined \$45.00 and costs.		
Myers, F., Lethbridge, Carrying firearms in bird sanctuary, no conviction but one Cooey .22 Cal. rifle seized by game officer.		
McCallum, M. D., Edmonton, Carrying loaded rifle in an automobile in Elk Island Park; fined \$10.00 and costs.		
McFarlane, Donald (Juvenile), Peace River, Shooting geese without a license; fined \$3.00 and costs.		
McLeod, James, Black Diamond, Hunting game birds during closed season, fined \$25.00.		
McLeod, John L., Medicine Hat, Hunting on land without owner's consent, fined \$25.00 and costs.		
McMutt, William, Rocky Mtn. House, Trapping muskrats on unauthorized lands; fined \$15.00 and costs.		
Moore, Elkan G., Cheecham, Failing to keep accurate records of pelts purchased and sold; fined \$50.00 and \$6.00 costs.		
Murphy, Ronald W., Taber, Hunting antelope during closed season; fined \$25.00 and \$8.00 costs.		
Nelson, Elmer, High Prairie, In possession of illegal deer meat; fined \$10.00 and costs.		
Nielsen, Laurence, Barnwell, Hunting pheasants during closed season; fined \$15.00 and costs.		
O'Brien, Richard, Picture Butte, Hunting pheasants on Sunday; fined \$15.00 and costs.		
Olson, Palmer, Seven Persons, Hunting over posted land; fined \$15.00 and costs.		
Pawluk, Paul, Waskatenau, Failing to produce hunting license; fined \$10.00 and costs.		
Pederson, Sidney, Mirror, Shooting ducks on Sunday; fined \$10.00 and costs.		
Peterson, Fred, Boscombe, Hunting big game without a license; fined \$10.00 and costs.		
Phillips, Roy, Deville, Hunting ducks without a license; fined \$10.00 and costs.		
Piertrejkowski, D., St. Edward, Unlawfully in possession of deer meat; fined \$50.00 and costs.		
Piven, Oliver, Lac La Biche, Having moose meat in his possession at his logging camp; fined \$50.00 and \$2.00 costs.		
Plante, Henry, St. Edward, Unlawfully in possession of deer meat; fined \$50.00 and costs.		
Poelzer, Edward, Sub P.O. 13, Calgary, Removing sex evidence from big game animal in transportation; fined \$25.00 and costs.		
Polok, Edward, Athabasca, Unlawfully hunting fur-bearing animals; fined \$25.00 and costs.		
Prins, John, Barnwell, Unlawfully shooting muskrats; fined \$5.00 and costs.		
Prushko, Leon, Smoky Lake, Hunting game birds during closed season; fined \$20.00 and costs. Also carrying a loaded firearm in vehicle; fined \$10.00 and costs.		
Quinton, R., 215-7th St. W., Calgary, Shooting a pheasant during closed season; fined \$15.00 and costs.		
Randall, Leslie S., Innisfail, Allowing another person to trap on his muskrat permit; fined \$10.00 and costs.		
Redcrow, Louis, Hobbema, Unlawfully trapping muskrats; fined \$5.00 and costs.		
Reid, Arnold, Whitelaw, Hunting ducks without a license; fined \$10.00 and costs.		
Reid, Robert, Whitelaw, Hunting ducks without a license; fined \$10.00 and costs.		
Reidford, W. G., Manola, Unlawfully in possession of deer meat on his premises in connection with logging operations; fined \$25.00 and costs of \$2.50.		
Renner, Roy, Taber, Hunting antelope during closed season; fined \$25.00 and costs.		
Ricard, George, Westlock, Unlawfully in possession of moose on his premises, used for logging and saw-mill; fined \$25.00 and \$4.50 costs.		
Rivard, Adelard, Donnelly, Hunting ducks during closed season; fined \$10.00 and costs.		
Rivier, John E., Pincher Creek, Hunting big game during closed season; fined \$75.00 and costs.		

Name	Address	Nature of Complaint
Roberts, R. W., Elkton,	Hunting big game during closed season; fined \$50.00 and costs.	
Also hunting big game using rifle firing .22 rim-fire cartridge; fined \$10.00 and costs.		
Rodzinyak, Andy (Juvenile), 1836-6th Ave. N., Lethbridge,	Hunting on privately-owned land; no conviction but rifle confiscated to the Crown.	
Roskavich, John, Breynat,	Illegal possession of big game; fined \$25.00 and costs. Also in possession of two illegal caribou hides; fined \$15.00 and costs.	
Schmidt, Edward, Taber,	Hunting antelope during closed season; fined \$50.00 and \$3.00 costs.	
Schultz, A. H., Bashaw,	Unlawfully in possession of 14 geese; fined \$10.00 and \$3.75 costs.	
Sears, Robert S., Stettler,	Carrying a loaded rifle in a motor vehicle; fined \$10.00 and costs.	
Shannon, Jos., Medicine Hat,	Hunting on land without owner's consent; fined \$25.00 and costs.	
Shantz, Howard, Calmar,	Hunting game birds on Sunday; fined \$25.00 and costs.	
Shaw, Marshall F. (Juvenile), 243-12th St. N., Lethbridge,	Hunting on privately-owned land; no conviction but rifle confiscated to the Crown.	
Shepheard, Edward H., Bassano,	Illegal possession of antelope; fined \$25.00 and costs.	
Shepherd, Malcolm, Wildwood,	Unlawfully trapping muskrats; fined \$5.00 and costs.	
Shoop, Wm. George, Kinuso,	Hunting and trapping fur-bearing animals on trapline without certificate of registration; fined \$200.00 and costs.	
Short, Wm., Lethbridge,	Hunting female pheasants; fined \$20.00 and costs.	
Smart, Murray, 2415-27th St. S.W., Calgary,	Unlawfully hunting migratory birds; fined \$25.00 and costs.	
Smith, William, High Prairie,	Unlawfully in possession of flesh of big game; fined \$5.00 and costs.	
Stevenson, Manville,	Hunting game birds during closed season; fined \$15.50 and costs.	
Stogrin, Henry, Magrath,	Illegal possession of fur-bearing animals; fined \$20.00 and costs.	
Strynadka, Kost, Ispas,	Illegal possession of big game; fined \$20.00 and costs.	
Tabler, Carl M. Jr., Alliance,	Shooting big game with horns less than four inches in length; fined \$50.00 and costs.	
Tabler, Lawrence, Forestburg,	Shooting within one-half mile of Sullivan Lake; fined \$10.00 and costs.	
Taylor, Robert, Groton,	Hunting on posted land; fined \$20.00 and costs.	
Teierle, John Jr., Medicine Hat,	Hunting on land without owner's consent; fined \$25.00 and costs.	
Theriault, Clement, Donnelly,	Hunting ducks during closed season; fined \$10.00 and costs.	
Thomas, Harold, Stauffer,	Failing to attach a big game tag to deer carcass; fined \$25.00 and costs.	
Trottier, Jos., Bowness,	Unlawfully shooting fur-bearing animals; fined \$10.00 and \$6.60 costs.	
Tunstall, John, Rolling Hills,	Found in possession of a hen pheasant; fined \$25.00 and costs.	
Tyo, Stanley, Retlaw,	Shooting game birds during closed season; fined \$15.00 and costs.	
Tyschuk, James, Wildwood,	Hunting game birds without a license; fined \$5.00 and costs.	
Ursuliak, George, Hairy Hill,	Trapping muskrats without a license; fined \$25.00 and costs of \$2.50.	
Van Buskirk, G., Tofield,	Trapping muskrats on game preserve; fined \$12.50 and costs. Also illegal possession of muskrat pelts; fined \$12.50 and costs.	
Van Buskirk, V., Tofield,	Trapping muskrats on game preserve; fined \$12.50 and costs. Also illegal possession of muskrat pelts; fined \$12.50 and costs.	
Von Hollon, Norman, Alhambra,	Killing deer on a coyote drive; fined \$75.00 and costs.	
Von Ifland, D., 605-13th Ave., N.E., Calgary,	Unlawfully killing a cow moose; fined \$35.00.	
Wakaluk, Wm., Blairmore,	Taking game in a game preserve; fined \$75.00 and costs.	
Walenchik, K., 12206-71 St., Edmonton,	Killing big game with horns less than four inches in length; fined \$15.00 and costs.	
Warawa, Joe, Edmonton,	Unlawfully shooting game birds; fined \$15.00 and costs.	
Watkins, William, Strachan,	Shooting squirrels without a license; fined \$5.00 and costs. Illegal possession of big game; fined \$5.00 and costs. Unlawfully killing a doe deer; fined \$10.00 and costs.	
Weins, Frank, Coaldale,	Hunting game birds without a license; fined \$5.00 and costs.	
Weiss, Hilbert R., 10925-97th St., Edmonton,	Shooting on highway; fined \$5.00 and costs.	
Wertapora, Nick, St. Paul,	Hunting over privately-owned land; fined \$25.00 and costs.	
West, Clifford, Picture Butte,	Hunting game birds on Sunday; fined \$15.00 and costs. Unlawfully hunting pheasants and partridge; fined \$10.00 and costs.	
White, Peter, 10630-112th St., Edmonton,	Unlawfully discharging a rifle; fined \$10.00 and costs.	
Wickman, Peter, Brainard,	Illegal possession of deer meat; fined \$5.00 and costs.	
Wutzke, Otto, Woolchester,	Investigation re hunting without a license; no fine imposed.	
Zawatski, Paul, Chipman,	Illegal possession of muskrat pelts; fined \$25.00 and costs.	
Zittlau, George, Barrhead,	Unlawfully in possession of parts of two deer; fined \$10.00 and costs.	
Zulivski, William, Alder Flats,	Unlawfully in possession of elk carcass; fined \$25.00 and \$3.00 costs.	

## FISHERIES

### Report of the Superintendent of Fisheries, H. B. Watkins

The report for the fiscal year ending March 31st, 1950, emphasizes the increased interest taken in angling for trout, grayling and Rocky Mountain whitefish, during the past five-year period. The 1949 sale of seasonal angling permits numbered 17,208 and the limited angling permits 1,788, an increase of 5,376 and 637 respectively over the previous year. A comparison with the 1945 season, which accounted for 6,503 seasonal angling permits and 427 limited angling permits, represents the upward swing which has almost trebled angling intensity. In reviewing angling intensity mention should be made that residents of Alberta do not require a permit to angle for the coarser varieties of fish, such as pike, pickerel, perch and goldeye. While it is impossible to obtain a statistical return of the number of people who engage in angling without a permit for the coarser varieties of fish, it is estimated that a conservative figure would be 25,000 at the present time.

In the commercial fishery, the closure of Lac La Biche and Pigeon Lake to whitefish fishing, a conservation measure, has had the effect of reducing the number of licenses to a total of 2,728 for the current year from the previous year's total of 3,215, a reduction of 487. The domestic fishing licenses of 90 are 10 less than last year's but are substantially the same as for the prior two years. No significant change is indicated in the number of fish dealer's licenses, 93 for the year. It is not anticipated this class of license will increase materially since packing plants are now fairly well established at all important centres.

Facilities for boating at vacation resorts were increased by the addition of 9 motor-boat licenses, making a total of 32 for the season.

The commercial catch of fish accounted for 6,284,060 pounds for the year, a decrease of 938,841 pounds since the last report. This substantial decrease is reflected in the tullibee take on Lesser Slave Lake which, through a smaller local demand and consequently a lessened fishing effort, resulted in a decline of 1,207,846 pounds. The whitefish commercial fishery has shown no significant change for the last three years and this year's production of 1,869,849 pounds indicates a seasonal fluctuation by an increase of 110,033 pounds. Since last reporting, the catch of pike has shown no marked change, the present catch amounting to 592,782 pounds an increase of 42,985 pounds. Pickerel, on the other hand, accounted for only 135,656 pounds, a decrease of 123,388 pounds attributed to a slack fishing effort for this variety. The perch production of 54,265 pounds was controlled by market demand and represents a small increase of 7,710 pounds since last year.

Export of fish from Alberta totaled 1,344,841 pounds for the year, 105,148 pounds from last year. Shipments of pickerel, pike and perch declined and are mainly responsible for the decrease in the export total. Whitefish is the important export

product and out of the total of 1,138,405 pounds of whitefish shipped 892,386 pounds were shipped to Chicago markets, 106,105 pounds to New York and 138,954 pounds to Canadian markets outside of Alberta.

Little improvement has been noted in the prices paid to fishermen by the dealers throughout the year and with one exception, prices have remained steady. Production has been absorbed, but, the local price is influenced by the large quantities of fish from Great Slave Lake which are channeled through Edmonton. The Great Slave Lake fishery has been responsible for stabilizing the prices paid to local fishermen at a low level compared to prices paid for other primary food products. Fishermen received a total of \$377,114.44 for their fishing efforts, a slight increase over the \$374,991.83 paid by the buyers last year. The average prices paid to fishermen for the different varieties of fish were: whitefish 12½c, pickerel 8c, pike 5c, perch 9c and tullibee 2½c. On one day only did the fishermen benefit from exceptional keen competitive buying and that was on March 21st, 1950, on Wabamun Lake. At that time Great Slave Lake production had ceased and an abnormal scarcity of fresh whitefish occurred on the Chicago and New York markets. Competitive buying opened at 20c per pound and at the close of the day buyers were offering 45c. This establishes an all time high paid to fishermen for Alberta whitefish.

The market value of the year's production amounted to \$652,538.06 a sum slightly larger than last year's total of \$636,-396.01.

The industry as a whole has taken cognizance of the need for an improved quality product and the co-operation manifested by the dealers and fishermen in supporting the present regulations has been very satisfactory. Packing plants have been improved considerably, the handling and care of fish has undergone a radical change from the former slipshod method and spoilage of fish is now at a minimum.

#### SURVEYS

The biological survey of provincial waters was extended again this year under the guidance of Dr. R. B. Miller of the Zoology Department, University of Alberta, assisted by members of the Fisheries staff. A consolidation of the preliminary biological surveys for the years 1947 to 1949 were printed and distributed to interested agencies during the year. A summary of the work done during the current season follows:—

*Calling Lake.* Calling Lake which lies about 30 miles north of the Town of Athabasca, has an area of approximately 52 square miles. Its shores are mainly sandy, and development of shallow water weed beds is scanty. The surrounding country is heavily forested, the trees extend to the lake margin in most places. The lake is moderately deep and, because of its shape, thoroughly warmed and aerated. This had led to a fairly rich plankton growth. In general, however, the lake is unproductive due to its sandy basin and low shore development. In 1947, ap-

preciating that egg loss was occurring due to low-water levels, a dam was built across Calling River which raised the lake to its normal level. Even with the restored lake level, the hard, sandy shores of the lake, where the whitefish spawn, slope rather gradually into deep water. In many places there are shelves, apparently formed by ice pushes when the lake level was low. If the fish spawn on top of these the danger of egg loss is still great. Calling Lake has an abnormally small population of fast-growing whitefish, and the collapse of the fishery was due to this natural phenomenon—a small fish population. The problem is to determine why the population is small. It has been observed that some years, great windrows of whitefish eggs were washed up on the shores of Calling Lake in the late fall, following spawning. Furthermore, the eggs remaining in the lake have been washed into the shallows where they are liable to destruction by freezing in late winter. This has probably happened to a greater or lesser extent to all year classes of the last ten years. The level of the lake has been unusually low for this period, a condition which would contribute to egg destruction. In the meantime, the present policy of restricted and carefully watched fishing seems the only course to pursue.

*Goldeye Lake.* Goldeye Lake is located in Township 40, Range 16, west of the 5th Meridian, in the Nordegg district. It has an area of 100 acres and a maximum depth of 45 feet. Thermal stratification and oxygen depletion occur; the latter may become severe by midsummer. Chara extended in a dense mat on the bottom from the shore out 20 or 30 feet. The bottom appeared to be soft everywhere. Plankton was not abundant as the transparency was 15 feet. An inlet and outlet were present; the latter was flowing, a small stream 2 feet wide and 8 inches deep.

*Beauvais Lake.* Beauvais Lake lies in the southwest quarter of Section 29, Township 5, Range 1, west of the 5th Meridian, in the Pincher Creek district. It has an area of about one-sixth square miles, about three-quarters of a mile long and one-quarter wide. The banks are high and steep except at the two ends where the shores are low and marshy. The inlet comes from marshy country to the northwest; the outlet leaves through similar country to the southeast, draining ultimately into Pincher Creek. The deepest water found was 29 feet; no thermal stratification was present and complete circulation probably occurs all summer. No spawning grounds were observed and it is possible no spawning occurs in the lake. Annual plantings of not more than 2,000 yearling trout are suggested.

*Burmis Lake.* Burmis Lake is a very small, spring-fed pond located in the Crowsnest Pass just south of the highway and across it from the town of Burmis. It has an area of about one acre, is roughly circular, with high rocky banks forming the southern shore and a more gentle, open, glassy slope elsewhere. The east shore has some trees and is used as a picnic and bathing spot as well as pasturage and water-hole for cattle. There is no inlet or outlet. The lake has a maximum depth of 9 feet, plankton was quite rich. The bottom fauna appeared to be poor. No

forage fishes were seen. The lake does not appear to be suitable as a rearing pond for trout.

*Long Lake.* Long Lake is in the Hayter-Chauvin district, Township 41, Range 1, west of the 4th Meridian. The lake is about  $1\frac{1}{4}$  miles long and up to  $\frac{1}{4}$  mile in width, and is surrounded on the north and south by brush-covered hills. There is no visible outlet. The lake is spring fed and contains fresh water. The eastern two-thirds is very shallow with only a small area 12 feet deep and is overgrown with aquatic plants, mostly pond lilies. The western third is possibly habitable the year round, but this is by no means a certainty. A planting of yearling and older pike and perch has been made. Further management may be based on the fate of these fish during the next two winters.

Five lakes in the Edmonton district were examined to determine what, if any, species of fish might be planted to provide angling.

*Cottage Lake.* This lake lies in Township 52, Range 2, west of the 5th Meridian. It has an area of approximately 0.4 square miles. The surrounding country is rolling, partly wooded and sandy in patches. The lake shore is mostly of mud and the lake bottom is soft, with one fine sand beach on the east side. The greatest depth found was 30 feet and there is a considerable area of water of 20 feet or more in depth. A shallow, sandy bar runs across the southern end and divides the lake into two basins. A dredging at 22 feet yielded a rather poor fauna of 2.0 cc per square foot. This is an unproductive lake but still deep enough to support a perch population. The lake is not suitable for trout or pickerel, and it is recommended that perch be planted, and, if these survive, introduce pike.

*Allen Beach Lake.* This little lake lies in Section 9, Township 53, Range 1, west of the 5th Meridian. It is approximately  $\frac{3}{4}$  mile long and very narrow, only 100 yards in places. It lies in a narrow valley, its long axis east and west. No inlet or outlet is operating at the present time. The lake has a remarkable depth contour. There are a series of deep holes, the deepest 92 feet, with narrow ridges between them. As would be expected in a lake of this type, temperature stratification occurs. A warm surface layer extends 20 feet. Below this, the temperature falls rapidly. There is the same stratification of oxygen; sufficient for fish is present only in the upper 20 feet of water. There is evidently no circulation in the lake as the pH is also stratified (7.6 at the surface, 7.2 at 70 feet). A considerable amount of dissolved carbon dioxide is present in the deep water. The shores slope so steeply that there is little shallow-water life. On the whole, the food supply is very good. Allen Beach Lake suffers from severe stagnation. It is unsuitable for trout and will not support a fast growing population of any fish.

*Lake Eden.* This lake lies in the same general area as Allen Beach Lake. It is about the same size and shape, though not quite so narrow for its length. There is a much greater shore development with extensive beds of reeds, pond lilies and ruffled pond weeds. The greatest depth is 45 feet and most of the lake

is at least 30 feet deep. Thermal stratification was evident, the temperature dropping sharply from 15 feet. Oxygen depletion was evident below the thermocline. The transparency of the water was 10 feet, the fauna poor, very similar to that of Cottage Lake. This lake is not suitable for trout or pickerel. It should support perch and pike. If the perch are stunted, heavier fishing is the only practical remedy.

*Lake Mere.* This small lake (approximately  $\frac{1}{8}$  square mile) lies in Township 53, Range 1, west of the 5th Meridian. It is a marshy lake with reedy shores and a muck bottom supporting pond lilies and masses of filamentous green algae. The outlet creek is dry. Two series of soundings were made. Maximum depth is 19 feet. Most of the lake is from 6 to 12 feet deep. In spite of the shallow water there is a considerable drop in temperature with depth and a corresponding reduction in oxygen. The water is neutral—pH 7.0. As the general drainage is alkaline, this indicates incipient acid conditions. Dredging at 18 feet failed to find life. This lake is unsuitable for trout and probably almost unsuitable for any other type of fish. At best, a few perch and pike might survive.

*Hastings Lake.* This lake lies east of Edmonton in Township 51, Range 20, west of the 4th Meridian. It has an area of approximately  $3\frac{1}{2}$  square miles. It formerly drained into Beaverhill Lake and thence to the North Saskatchewan River. Two sounding lines were run, the maximum depth is 17 feet and much of the lake is 12 to 14 feet deep. It is thus a very shallow lake and winter-kills are to be expected in severe winters. It should not suffer every winter, however, as there appears to be enough water to carry perch through ordinary winters. The water warms from top to bottom. More or less regular plantings with perch seems the only way to provide angling.

*Spray Lakes Watershed.* The Spray Lakes and Spray River below the lakes have long been famous for Cutthroat fishing. The development of the lakes into a water reservoir for power purposes, now begun, will alter the whole area considerably. The main dam is being built across the upper end of the Spray gorge about two miles below the falls and immediately below the outlet of Woods Creek from the Lower Spray Lake. This dam will flood 4,800 acres of the valley occupied by the lakes and create a lake some 15 miles long. The lake will be contained by a second dam, the Three Sisters' dam, where the take-off of water for power purposes will be controlled. At full level the lake surface will be 5,580 feet above sea level. When the main dam is completed the following changes will occur;—

1. The Upper and Lower lakes will merge and be enlarged to make one large lake about 40 feet deep at its upper end and over 200 feet deep at its lower end.
2. Buller and Woods Creeks, present spawning areas for the lake fish, will disappear.
3. Spray Falls will disappear. There will be no barrier to movement from the reservoir to the headwaters of the Spray River.

4. The extensive spawning areas immediately below Spray Falls will disappear.

5. The Spray River below the main dam will be greatly reduced in size. It seems very probable that five to ten miles of the Spray River immediately below the dam will be dry or nearly dry for a large part of each year. The flow in the Spray below this near-dry portion will be continuous but much reduced.

6. Spawning areas in the Upper Spray at the mouth of Bryant Creek will be eliminated.

The reservoir will be operated in the same way as Lake Minnewanka, i.e., water will be stored during the spring run-off to a maximum of 170,000 acre feet. Any additional water (which will be only in rare, very wet springs) will be discharged through an overflow around the dam and into the Spray River below the gorge. Of the water stored, 150,000 acre feet will be available for power. If all of this is used during late summer and fall for power development, the reservoir level will drop approximately 35 feet and 1,400 acres of land will be exposed. The draw down at Three Sisters' dam will be a sub-surface one.

It seems likely that the fast-growing, highly-colored lake (Cutthroat) population will disappear. Their spawning areas are eliminated. To find new ones they will be forced to migrate up the Spray River for five or more miles. Here they will merge with the upper river population and disappear as a separate entity. The new, deep lake, with fluctuating water levels, will not produce much food for Cutthroat trout.

It follows that the fish now caught in the Spray River below the Falls and above 15 mile cabin will also disappear since, (a) the river will be dry and, (b) the dam will prevent them getting down river from the lakes, from where they now come.

The Cutthroat now living in the Lower Spray will be confined to a much smaller river. Their growth rate will suffer accordingly and they will degenerate to the small, slow-growing population, typical of such streams, such as the fish now found in Goat Creek or Smuts Creek.

It is obvious that the reservoir and dam will create prolonged changes in the Spray Lakes and the Spray River below the dam. Unfortunately, if the reservoir is to be operated effectively for power purposes, it is difficult to see how provision could be made for fishery protection. A few rather obvious points may be mentioned.

1. The new reservoir should be suitable for lake trout. The draw-down in late summer and fall will be poor for lake trout but they seem to be surviving this situation in Lake Minnewanka. It may be necessary to introduce Rocky Mountain whitefish to provide a food supply for the lake trout and additional angling.

2. In the Lower Spray River, a little labour with a bulldozer might accomplish much in fashioning new spawning bars at the proper depths, or in maintaining access to present spawning beds in Goat Creek.

*Oldman River Drainage.* The Oldman drainage is rich in food and trout make good growth. Reproductive conditions are

good and natural propagation is large. The waters are heavily fished and large fish are not abundant; those present are difficult to catch. There is no evidence that the brood stock is depleted to the point where repopulation with fry each year is not occurring. All waters contained large numbers of small trout. There is no evidence that introduced Rainbow trout do better in the drainage than the native Cutthroat. Beavers are of inestimable value, particularly in the short, precipitous streams draining into the Crowsnest River. Good growth of trout from beaver ponds is evident. Fish in small tributaries such as White, Ridge, Daisy, Vicary and Hidden Creeks, are not young fish which later drop down to the bigger streams. The fish in these streams stay in them and die in them unless caught. The trout in the larger streams spawn in the stream they live in, not in the small feeder streams.

Hatchery planting is most useful in special places, such as the Deadman dam development in the Crowsnest Pass. There is no evidence that hatchery planting will help in ordinary unmodified streams. It seems particularly useless to plant the larger rivers. Every effort should be made to protect existing beaver colonies and to establish new ones.

*Water Stabilization.* Continuing the program of water stabilization, several projects of importance in fishery management were completed by the united efforts of Ducks Unlimited, The Water Resources Branch of the Department of Agriculture and this Division. Dams at Sturgeon Lake, Amisk Lake, Anderson Lake and Albright Lake, were constructed under the management of Ducks Unlimited. Of these, Sturgeon and Amisk Lakes are valuable commercial producers of fish and support a fair angling fishery.

*Distribution of Fish.* Fish distribution of all species totaled 7,344,611 for the year. Of special interest was the planting of 258,640 Arctic grayling (eyed eggs) in the drainage of the North Saskatchewan and Clearwater Rivers. These Arctic grayling are native to Alberta and were obtained from the first experimental spawning of Arctic grayling undertaken by the Fisheries personnel. Favourable weather and water conditions in the early spring did much towards the success of operations at the spawning and eyeing station on Coldwater Creek in the Chip Lake district. Further work of similar nature is planned for the coming year.

Plantings of young perch were made in 22 lakes for a total of 252,023 fingerlings and yearling fish. Twelve lakes received 6,083,600 eyed pickerel eggs and three lakes were stocked with 3,809 adult pike. Details of plantings of the different species of trout (746,532) are given in the statistical portion of this report.

## FISH AND GAME ADMINISTRATION

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### REVENUE:

	1948-1949	1949-1950
Fishing licenses .....	\$16,763.00	\$14,645.00
Fish dealer's licenses .....	2,660.00	2,495.00
Boat licenses .....	136.00	180.00
Angling permits .....	24,603.60	37,048.24
Royalties .....	16,776.81	12,798.82
Casual .....	642.96	590.04
	<hr/> <u>\$61,480.87</u>	<hr/> <u>\$67,755.10</u>

Increase \$6,274.23

Licenses and permits .....	16,418	21,939
Prosecutions .....	76	133
Confiscations .....	70	70
Commercial fish catch (lbs.) .....	7,222,901	6,284,060

### LICENSES AND PERMITS

	1945-46	1946-47	1947-48	1948-49	1949-50
Angling Permits (Season) .....	6,503	9,038	10,099	11,832	17,208
Angling Permits (Limited) .....	427	629	848	1,151	1,788
Domestic Licenses .....	479	87	89	100	90
Fisherman's Licenses .....	4,700	4,643	3,603	3,088	2,581
Commercial Licenses .....	173	130	104	127	147
Fish Dealer's Licenses .....	.....	82	105	97	93
Motor-Boat Licenses .....	6	17	27	23	32
Totals .....	<hr/> <u>12,288</u>	<hr/> <u>14,626</u>	<hr/> <u>14,875</u>	<hr/> <u>16,418</u>	<hr/> <u>21,939</u>

### PROSECUTIONS:

	1948-49	1949-50
Fishing without license .....	16	16
Excess of per diem limit .....	...	...
Fishing out of season .....	4	21
Retaining under size fish .....	...	1
Using illegal gear .....	10	36
Pollution .....	2	2
Using fire-arms illegally .....	4	7
Illegal possession of fish .....	12	11
Illegal purchase or sale of fish .....	10	4
Illegal transportation of fish .....	1	7
Using gill net in stream .....	6	1
Operating illegal nets .....	3	11
Operating nets without markings .....	...	1
Operating nets other than licensee .....	...	2
Operating nets in closed area .....	8	6
Obstructing a fishery officer in line of duty .....	...	1
Angling in closed waters .....	...	6
Not completing dealer's statements .....	...	1
	<hr/> <u>76</u>	<hr/> <u>133</u>

### COMMERCIAL PRODUCTION OF FISH

Species	1945-46 Lbs.	1946-47 Lbs.	1947-48 Lbs.	1948-49 Lbs.	1949-50 Lbs.
Whitefish .....	3,253,621	2,649,881	1,776,629	1,759,816	1,869,849
Trout .....	79,860	111,878	21,372	3,463	15,177
Pike .....	657,837	585,146	702,239	559,797	592,782
Pickeral .....	846,083	612,466	388,243	259,044	135,656
Perch .....	206,047	244,957	200,685	46,565	54,266
Tullibee .....	3,374,624	6,688,432	6,614,847	4,339,130	3,159,532
Mixed Fish .....	167,033	179,838	292,532	255,096	456,799
Totals .....	<hr/> <u>8,584,005</u>	<hr/> <u>11,072,598</u>	<hr/> <u>9,896,647</u>	<hr/> <u>7,222,901</u>	<hr/> <u>6,284,060</u>

	Weight Lbs.	Value to Fishermen	Value as Marketed
Totals for year 1945-46 .....	8,584,005	742,098.48	1,451,717.14
Totals for year 1946-47 .....	11,072,598	600,292.43	1,340,589.95
Totals for year 1947-48 .....	9,896,547	449,165.66	856,496.06
Totals for year 1948-49 .....	7,222,901	374,991.83	636,396.01
Totals for year 1949-50 .....	6,284,060	377,114.44	652,538.06

## DEPARTMENT OF LANDS AND FORESTS

COMMERCIAL CATCH OF FISH IN POUNDS—1949-50

Lake	No. of Licenses	Ling	Tullibee	Suckers	Perch	Pickeral	Pike	Trout	Whitefish	Total
Amisk .....	2	86	11,200	156	70	25	265	.....	.....	11,800
Banana .....	94	1,000	.....	2,000	.....	.....	450	.....	.....	3,450
Battie .....	17	.....	.....	.....	340	1,995	3,113	.....	29,000	32,930
Beaver .....	8	.....	.....	.....	2,716	2,225	13,625	.....	16,051	21,509
Benish .....	1	.....	.....	.....	.....	.....	.....	.....	.....	16,566
Birch .....	8	485	2,419	.....	627	996	7,223	.....	600	11,750
Blackett .....	4	200	.....	.....	125	1,047	1,047	.....	.....	3,226
Bobtail .....	21	.....	.....	.....	1,000	17	17	.....	.....	15,700
Bourque .....	18	.....	.....	.....	4,316	17,899	17,899	.....	.....	23,562
Buck (65-17-4) .....	241	3,000	.....	.....	1,000	20,000	20,000	.....	56,775	62,775
Buck (46-6-5) .....	4	.....	.....	.....	10	22	22	.....	2,269	2,2301
Buck (61-19-5) .....	3	1,623	1,000	.....	55	.....	.....	.....	939	3,517
Burnt .....	22	18,260	6,350	82,050	3,070	12,870	12,870	.....	4,420	12,7010
Callling .....	14	.....	.....	.....	4,753	20,000	20,000	.....	20,000	44,848
Chipp .....	9	1,015	72,434	.....	10,886	.....	.....	5,760	.....	4,380
Christina .....	6	700	.....	.....	400	3,280	3,280	.....	.....	600
Cow .....	1	.....	.....	.....	205	4,985	4,985	.....	.....	300
Crooked .....	1	.....	.....	100	.....	.....	4,200	.....	.....	5,000
Cross .....	4	100	.....	.....	.....	4,900	4,900	.....	.....	3,504
Elinor .....	6	740	4,862	2,420	17	223	512	.....	2,752	3,170
Fawcett .....	1	.....	.....	.....	2,013	375	375	.....	4,400	1,3,580
Fiske .....	3	480	.....	.....	.....	.....	.....	.....	400	22,262
Floating Stone (Boyne) .....	97	.....	1,812	1,280	254	63	63	.....	.....	23,056
Fork .....	7	360	50	.....	113	11,332	11,332	.....	.....	14,887
Francis .....	6	65	.....	6,543	.....	75	17,350	17,350	.....	11,000
Frenchman .....	10	.....	.....	.....	432	2,210	2,210	.....	40,770	24,033
Frog .....	3	1,000	7,890	.....	940	8,395	8,395	.....	4,412	18,225
Georges (Cheechem) .....	1	.....	23,606	.....	6,065	7,640	7,640	.....	30,600	67,811
Heart .....	10	60	.....	.....	210	374	25,550	.....	.....	3,104
Heleena .....	6	.....	1,350	230	.....	1,770	1,770	.....	.....	3,350
Island (67-24-4) .....	2	125	275	.....	704	615	4,194	.....	.....	5,913
Jackson .....	7	256	1,970	.....	822	2,250	9,242	.....	.....	14,540
Kinnaird .....	5	.....	.....	.....	.....	833	45	.....	38,641	39,519
Lac Ste Anne .....	95	134,807	19,296	4,870	1,823	3,771	186,309	.....	.....	350,876
Lac La Biche .....	78	.....	.....	21,300	1,276	1,276	1,2400	.....	.....	22,700
Lawrence .....	6	.....	2,741,152	10,200	71,005	62,466	62,466	.....	571,838	3,600,205
Lesser Slave Lake .....	F 78	142,278	.....	.....	.....	.....	.....	.....	.....	7,660
Little Long .....	2	.....	.....	.....	1,960	5,700	5,700	.....	.....	5,700
Little Egg (Biotlo) .....	5	.....	.....	.....	1,122	3,447	3,447	.....	.....	4,569
Long (65-11-4) .....	11	.....	300	.....	500	120	120	.....	.....	1,645
Marie (65-2 and 3-4) .....	9	1,500	.....	2,000	1,000	2,500	2,500	.....	138,460	145,460

## FISH AND GAME ADMINISTRATION

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## DEPARTMENT OF LANDS AND FORESTS

## NUMBER AND VALUE OF VESSELS, BOATS, FISHING GEAR AND EQUIPMENT

	No.	1945-46 Value	No.	1946-47 Value	No.	1947-48 Value	No.	1948-49 Value	No.	1949-50 Value	No.	1949-50 Value
<b>VESSELS, BOATS</b>												
Row	132	\$6,134.00	359	\$9,160.00	143	\$3,820.00	110	\$3,490.00	188	\$6,660.00		
Gasoline	222	83,780.00	292	106,800.00	257	82,020.00	197	62,975.00	165	50,900.00		
Diesel	1	6,900.00	.....	.....	.....	.....	.....	.....	.....	.....		
Barges	3	16,000.00	.....	.....	2	400.00	.....	.....	.....	.....		
	358	\$111,814.00	651	\$115,950.00	402	\$86,240.00	307	\$66,465.00	353	\$57,550.00		
<b>PIERS AND WHARVES</b>												
Summer	31	\$7,000.00	37	\$8,370.00	51	\$21,335.00	19	\$5,220.00	29	\$2,375.00		
Winter	20	8,600.00	93	11,230.00	10	370.00	.....	.....	13	650.00		
<b>FISH PLANTS AND ICE HOUSES</b>												
Summer	63	\$34,750.00	180	\$44,920.00	150	\$81,185.00	30	\$31,395.00	46	\$27,320.00		
Winter	41	74,600.00	75	39,670.00	46	9,667.00	16	14,100.00	53	51,885.00		
<b>GILL NETS</b>												
May 16-Sept. 30	5,716	\$95,529.00	6,387	\$102,404.00	5,222	\$81,329.00	3,849	\$89,864.00	2,756	\$61,721.00		
Oct. 1-Dec. 31	3,760	49,238.00	6,304	66,856.00	1,613	20,894.00	1,930	23,080.00	1,830	35,412.00		
Jan. 1-Mar. 31	12,949	194,817.00	10,140	165,304.00	6,890	74,880.00	5,953	104,143.00	4,560	104,238.00		

## FISH AND GAME ADMINISTRATION

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QUANTITIES AND VALUE OF FISH CAUGHT AND MARKETED

Species	Period	Weight (lbs.)	Value to Fishermen	Value as Marketed
Whitefish	May 16/49 to Sept. 30/49 Oct. 1/49 to Dec. 31/49 Jan. 1/50 to Mar. 31/50	515,317 176,126 1,178,106	\$49,517.80 15,314.10 173,413.92	\$94,945.63 28,473.25 298,500.15
Trout (Lake)	May 16/49 to Sept. 30/49 Oct. 1/49 to Dec. 31/49 Jan. 1/50 to Mar. 31/50	1,860,849 15,177 .....	\$1,214.16 \$238,245.82 .....	\$421,919.03 \$3,642.48 .....
Pickeral	May 16/49 to Sept. 30/49 Oct. 1/49 to Dec. 31/49 Jan. 1/50 to Mar. 31/50	92,508 12,880 30,318	\$6,723.90 1,135.90 3,205.92	\$12,944.31 2,217.62 5,885.36
Pike	May 16/49 to Sept. 30/49 Oct. 1/49 to Dec. 31/49 Jan. 1/50 to Mar. 31/50	318,398 118,413 155,911	135,656 8,787.82 10,800.46	\$9,685.80 9,738.87 14,390.54
Tullibee	May 16/49 to Sept. 30/49 Oct. 1/49 to Dec. 31/49 Jan. 1/50 to Mar. 31/50	1,999,322 757,255 402,955	592,782 \$5,748.40 19,445.14	\$29,273.58 \$82,484.77 30,454.51
Perch	May 16/49 to Sept. 30/49 Oct. 1/49 to Dec. 31/49 Jan. 1/50 to Mar. 31/50	20,035 5,841 28,359	3,159,532 \$1,182.43 3,877.59	\$82,652.05 \$2,411.43 5,045.19
Mixed Fish (Ling, Suckers)	May 16/49 to Sept. 30/49 Oct. 1/49 to Dec. 31/49 Jan. 1/50 to Mar. 31/50	198,527 128,468 119,804	54,265 \$4,147.98 3,334.94 2,261.36	\$4,918.83 \$6,054.40 4,189.54 3,299.04
			456,799 <u>6,284,060</u>	\$9,744.28 <u>\$377,114.44</u> <u>\$6652,658.06</u>
				\$13,542.98

## DEPARTMENT OF LANDS AND FORESTS

## ALBERTA FISH EXPORTS, FISCAL YEAR 1949-50

EXPORTS TO CANADIAN MARKETS:		Weight in Pounds
Whitefish	.....	138,954
Pickerel	.....	9,998
Pike	.....	4,259
Perch	.....	2,054
Trout	.....	3,176
Tullibee	.....	6,691
Suckers	.....	150
		165,282
EXPORTS TO CHICAGO MARKETS:		
Whitefish	.....	892,386
Pickerel	.....	72,211
Pike	.....	56,440
Perch	.....	28,581
Trout	.....	7,123
Tullibee	.....	18,423
		1,070,164
EXPORTS TO NEW YORK MARKETS:		
Whitefish	.....	106,105
Pickerel	.....	1,260
Pike	.....	110
Tullibee	.....	960
		108,435
EXPORTS TO MISCELLANEOUS U.S. MARKETS:		
Whitefish	.....	960
RECAPITULATION:		
Whitefish	.....	1,138,405
Pickerel	.....	83,469
Pike	.....	60,809
Perch	.....	30,635
Trout	.....	10,299
Tullibee	.....	21,074
Suckers	.....	150
Total	.....	1,344,841

## TROUT DISTRIBUTION, 1949

## RAINBOW

	Eyed Eggs	Fingerlings	Yearlings
Old Man River:			
Star Creek	.....	450	.....
Allison Creek	.....	450	.....
Crowsnest River	.....	6,060	.....
Glacier Creek	.....	1,880	.....
Cyr Creek	.....	1,250	.....
Screwdriver Creek	.....	350	.....
McGillivray Creek	.....	500	.....
Castle River	.....	1,100	.....
Waterton River:			
Drywood Creek	.....	1,200	.....
Pine Creek	.....	3,890	.....
Carpenter Creek	.....	1,600	.....
Butcher Creek	.....	1,400	.....
Yarrow Creek	.....	598	.....
Cottonwood Creek	.....	1,500	.....
Athabasca River:			
Horse Creek	.....	3,000	.....
Sundance Creek	.....	6,500	.....
Lakes:			
Butcher Lake	.....	2,400	.....
Beauvais Lake	.....	7,110	.....
Obed Lake	.....	20,000	.....
Goldeye Lake	.....	19,900	.....
Bratt Lake	.....	9,994	.....
Sylvan Lake	30,000	10,750	.....
Cardston Ponds	.....	22,677	.....

## CUTTHROAT

Old Man River:			
Trout Creek	.....	5,000	.....
Byron Creek	.....	2,500	.....
Allison Creek	.....	3,500	.....
Ptolemy Creek	.....	400	.....
York Creek	.....	2,900	.....
Lynx Creek	.....	400	.....
Lost Creek	.....	200	.....
Carbondale River	.....	800	.....
Gardner Creek	.....	869	.....

FISH AND GAME ADMINISTRATION

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	Eyed Eggs	Fingerlings	Yearlings
Blairmore Creek .....	.....	1,210	.....
Gold Creek .....	.....	1,210	.....
Morin Creek .....	.....	1,210	.....
Crowsnest River .....	.....	500	.....
Deadman Creek .....	.....	1,360	.....
<b>Bow River:</b>			
Flat Creek .....	.....	4,988	.....
Pekisko Creek .....	.....	4,997	.....
Highwood River .....	.....	6,500	.....
Sullivan Creek .....	.....	5,999	.....
Sheep River .....	.....	6,200	.....
Yeske Creek .....	.....	2,500	.....
Spring Creek .....	.....	800	.....
Dieble Creek .....	.....	1,500	.....
Lone Prairie Creek .....	.....	1,498	.....
<b>EASTERN BROOK</b>			
North Saskatchewan River:			
Hornet Creek .....	.....	14,000	.....
Strip Creek .....	.....	6,000	.....
Prairie Creek .....	.....	38,000	.....
Cow Creek .....	.....	4,000	.....
Buster Creek .....	.....	2,000	.....
Shunda Creek .....	.....	10,000	.....
Lookout Creek .....	.....	10,000	.....
Brierty Creek .....	.....	50	.....
Chambers Creek .....	.....	.....	1,950
Old Man River:			
North Branch Willow Creek .....	.....	20,000	781
Gold Creek .....	.....	10,000	.....
Mill Creek .....	.....	9,990	.....
Athabasca River:			
Gregg River .....	.....	5,000	.....
Mary Gregg Creek .....	.....	2,500	.....
Whitehorse Creek .....	.....	10,000	.....
McKenzie Creek .....	.....	10,000	.....
Chance Creek .....	.....	2,000	.....
McNeil Creek .....	.....	4,000	.....
McLeod River .....	.....	4,000	.....
Bow River:			
Highwood River .....	.....	1,000	.....
McPhail Creek .....	.....	7,000	.....
Junction Creek .....	.....	5,990	.....
Ford Creek .....	.....	13,960	.....
Jumping Pound Creek .....	.....	33,000	.....
Blue Rock Creek .....	.....	5,992	.....
Etherington Creek .....	.....	5,982	.....
Cataract Creek .....	.....	3,992	.....
Bragg Creek .....	.....	17,991	.....
Beaver Creek .....	.....	3,500	.....
Loomis Creek .....	.....	.....	400
Dyson Creek .....	.....	.....	400
Red Deer River:			
Hosegood Creek .....	.....	.....	1,843
Fallen Timber Creek .....	.....	.....	1,498
Raven River .....	.....	.....	1,937
Lowrie Creek .....	.....	.....	1,048
Schrader Creek .....	.....	.....	710
Alford Creek .....	.....	.....	470
Mary Gregg Lake .....	.....	2,500	.....
Cold Lake .....	150,000	.....	4,000
Calling Lake .....	50,000	.....	.....
<b>LAKE TROUT</b>			
Battle Lake .....	.....	8,000	.....
Ghost Reservoir .....	.....	50,448	.....

**TOTAL DISTRIBUTION OF TROUT:**

Rainbow .....	.....	154,559
Cutthroat .....	.....	56,541
Eastern Brook .....	.....	476,984
Lake Trout .....	.....	58,448
<b>Total .....</b>	<b>.....</b>	<b>746,582</b>

## DEPARTMENT OF LANDS AND FORESTS

## ARCTIC GRAYLING

	Eyed Eggs	Adult
North Saskatchewan River:		
Clearwater River .....	92,400	.....
Horseshoe Creek .....	36,900	.....
North Saskatchewan River .....	55,440	.....
Wolf Creek .....	73,900	.....
Total .....	<u>258,640</u>	.....

## PICKEREL

Henderson Lake .....	35,400	.....
Pigeon Lake .....	495,600	.....
Conjuring Lake .....	212,400	.....
Battle Lake .....	212,400	.....
Lake Newell .....	1,130,000	.....
Chin Lakes .....	1,097,000	.....
Lake McGregor .....	1,060,000	.....
Clear (Barnes) Lake .....	566,400	.....
Lac St. Cyr .....	177,000	7
Silver (Stoney) Lake .....	177,000	.....
Lake Wabamun .....	424,800	.....
Lac Ste Anne .....	<u>495,600</u>	.....
Total .....		<u>6,083,607</u>

## PIKE

	Adult
Lac St. Vincent .....	70
Lac St. Cyr .....	139
Long Lake .....	3,600
Total .....	<u>3,809</u>

## PERCH

	Fingerlings	Adult
Armstrong Lake .....	20,500	.....
Blackburn Lake .....	25,000	.....
Coal Lake .....	10,000	.....
Fish Lake .....	25,000	.....
Hardisty Lake .....	20,000	.....
Pfouts Lake .....	20,700	.....
Coal Lake .....	20,000	.....
Dried Meat Lake .....	15,000	.....
Long Lake .....	14,400	.....
God's Lake .....	8,000	.....
Kriebie Lake .....	2,000	.....
Canue Lake .....	5,000	.....
Tawatinaw Lake .....	15,000	.....
Cooking Lake .....	7,995	.....
Cottage Lake .....	5,000	.....
Crystal Lake .....	3,500	.....
Hastings Lake .....	9,950	.....
Sandy Lake (55-1-W-5) .....	6,950	.....
Thunder Lake .....	3,000	.....
Hondo Lake .....	15,000	.....
Lac St. Cyr .....	.....	2
Lac St. Vincent .....	.....	<u>26</u>
Total .....		<u>252,023</u>

## TOTAL DISTRIBUTION ALL SPECIES

Trout .....	746,532
Arctic Grayling .....	258,640
Pickeral .....	<u>6,083,607</u>
Pike .....	3,809
Perch .....	252,023
Total .....	<u>7,844,611</u>

## PROSECUTIONS 1949 - 1950

Name	Address	Penalty	Offence
John Rain, Duffield,	\$24.00.	Fishing with overyardage.	
Tom James, Duffield,	Reprimand.	Fishing with overyardage.	
Palmer Kjosness, Edmonton,	\$13.50.	Angling in closed season.	
Pete Semenyina, Evansburg,	\$13.00.	Shooting pike.	
Albert Boisjoll, Tomahawk,	\$17.50.	Angling in closed season.	
Ken Steele, Edmonton,	\$13.00.	Shooting pike.	
Roy Steele, Edmonton,	\$18.00.	Shooting Pike.	
Donald Steele, Edmonton,	\$13.00.	Shooting pike.	
Tom Thompson, Entwistle,	\$13.00.	Shooting pike.	
Tom Sullivan, Entwistle,	\$13.00.	Shooting pike.	

Name	Address	Penalty	Offence
Lawrence Olson, Edmonton, \$13.50, Angling in closed season.			
E. O. Bertwell, Edmonton, \$13.50, Angling in closed season.			
John Schurman, Edmonton, \$13.50, Angling in closed season.			
Edward Missel, Edmonton, \$13.50, Angling in closed season.			
Robert Missel, Edmonton, \$13.50, Angling in closed season.			
Ray Hazariga, Tomahawk, \$13.50, Angling in closed season.			
Thomas Vaughan, Onoway, \$8.50, Snaring fish.			
Herbert Lee, Onoway, \$8.50, Snaring fish.			
G. Fox, Edmonton, \$13.50, Angling in closed season.			
H. Book, Edmonton, \$13.50, Angling in closed season.			
Otto Klaat, Edmonton, \$13.50, Angling in closed season.			
W. Boollatt, Edmonton, \$13.50, Angling in closed season.			
Bernard Reich, Tomahawk, \$18.50, Operating nets in closed waters.			
Richard Reich, Tomahawk, \$18.50, Snaring pike.			
Premo Pezzot, Tomahawk, \$8.50, Possession of pike out of season.			
Valentine Nevoht, Evansburg, \$13.00, Possession of pike out of season.			
Ray Caswell, Gunn, \$13.00, Snaring pike.			
Joe Kovacs, Shaughnessy, \$8.50, Angling in closed season.			
Steve Kovacs, Shaughnessy, \$8.50, Angling in closed season.			
Edward Chudleigh, Picture Butte, \$8.50, Angling in closed season.			
J. Evasi, Edmonton, \$13.00, Angling in closed season.			
J. Muskarovich, Edmonton, \$13.00, Angling in closed season.			
Edward Sutherland, Gunn, \$9.00, Snaring fish.			
Doug Hathaway, Manola, \$19.00, Shooting pike.			
Bill McMillan, Edmonton, \$12.50, Fishing without a permit.			
Edward McCoy, Edmonton, \$12.50, Fishing without a permit.			
Paul Vasseur, Bonnyville, \$17.50, Fishing in closed waters.			
Norman Hunter, Goodfish Lake, \$29.00, Fishing with overyardage of nets.			
Fred Favell, Boyne Lake, \$13.50, Fishing with overyardage of nets.			
Alfred Reimer, Crooked Creek, \$19.50, Angling without a permit.			
John Prins, Lacombe, \$15.00, Angling without a permit.			
Rudolph Yeliga, Coleman, \$54.50, Angling in closed waters.			
Karl Perina, Coleman, \$52.00, Angling in closed waters.			
E. Phillips, Coleman, \$52.00, Angling in closed waters.			
Alex Lefebvre, Cold Lake, \$14.50, Operating overyardage on Domestic License.			
John Dobek, Bellevue, \$54.50, Angling in closed waters.			
Geo. Mahieux, Blairmore, \$12.50, Retaining undersize fish.			
Metro Shewchshyn, Plamondon, \$27.50, Illegal possession of fish.			
Harry Basarab, Lac La Biche, \$18.00, Operating illegal size mesh of nets.			
Charles Howel, Lac La Biche, \$13.00, Operating gill-nets without license.			
Mike Steffin, Lac La Biche, \$18.00, Operating gill-nets without a license.			
J. F. McCarthy, Burnis, \$7.50, Angling without a permit.			
John Charchanko, Cowley, \$9.50, Angling without a permit.			
Peter Cherkas, Lac La Biche, \$24.80, Operating illegal size mesh of nets.			
Guo Moberg, Boyle, \$17.50, Operating gill-nets without license.			
Henry Nordquist, Bondiss, \$17.50, Operating illegal size mesh of nets.			
Mike Zachruk, Lac La Biche, \$17.50, Operating nets other than license.			
Frank Malcolm, Innisfail, \$22.50, Angling in closed waters.			
Stanley Dent, Innisfail, \$22.50, Angling in closed waters.			
Joe Tremblay, Lac La Biche, \$7.50, Nets set after allotted time.			
Mike Ladouceur, Lac La Biche, \$7.50, Nets set before 12:00 noon opening date.			
George Spencer, Lac La Biche, \$17.50, Operating gill-nets without license.			
Pat Letendre, Alberta Beach, \$56.00, Operating gill-nets in closed season.			
Tony Marcinek, Condor, \$13.25, Snaring fish.			
Paul Sampietro, Lac La Biche, \$13.00, Pollution of waters.			
Rudolph Sampietro, Lac La Biche, \$13.00, Pollution of waters.			
Mike Luc, Plamondon, \$19.00, Operating small mesh nets.			
A. L. Stough, Elk Point, \$14.50, Illegal transport and sale of whitefish.			
Mike Luc, Plamondon, \$17.50, Operating gill-nets without license.			
L. W. Morgan, Calgary, \$24.50, Snaring fish, pollution of water.			
Gordon Ekiss, Olds, \$7.50, Angling without permit.			
A. Hagstrom, Queenstown, \$5.00, Angling without permit.			
Wm. Rinas, Fisher Home, \$78.50, Fishing without license and illegal possession of fish.			
M. R. Quick, Fisher Home, \$78.50, Fishing without license and illegal possession of fish.			
George Kereychuk, Andrew, \$52.50, Operating gill-nets in closed waters.			
John Ostafichuk, Sunland, \$37.50, Illegal possession of whitefish.			
Wm. Solowan, Kahawin, \$37.50, Illegal possession of whitefish.			
J. Hoffer, Crossfield, \$12.50, Illegal possession of whitefish.			
M. Tschetter, Crossfield, \$12.50, Illegal possession of whitefish.			
D. Tschetter, Crossfield, \$14.50, Illegal possession of whitefish.			
Chas. Pinsky, Cold Lake, \$52.50, Not completing dealer's statements.			
Gerald Johnson, Plamondon, \$27.50, Illegal possession of whitefish.			
J. Wiens, Bashaw, \$12.50, Fishing with spears.			
W. M. Simmons, Bashaw, \$12.50, Fishing with spears.			
J. Schneider, Bashaw, \$12.50, Fishing with spears.			
A. Schickerowsky, Bashaw, \$12.50, Fishing with spears.			
Sam Musser, Bashaw, \$12.50, Fishing with spears.			
H. Wiens, Bashaw, \$12.50, Fishing with spears.			
H. Legg, Fenn, \$12.50, Fishing with spears.			
M. Lohr, Stettler, \$12.50, Fishing with spears.			
M. J. Scott, Bashaw, \$12.50, Fishing with spears.			
Carl Kurtz, Bashaw, \$12.50, Fishing with snares.			
R. C. Pearson, Bashaw, \$12.50, Fishing with snares.			
C. A. Shoemaker, Bashaw, \$12.50, Fishing with snares.			
H. A. Sheunaman, Bashaw, \$12.50, Illegal fishing.			
Gus Fisher, Warburg, \$3.25, Transporting non-inspected whites.			
A. Campbell, Edmonton, \$5.25, Transporting non-inspected whites.			
R. Borchard, Leduc, \$7.50, Transporting non-inspected whites.			

## DEPARTMENT OF LANDS AND FORESTS

Name	Address	Penalty	Offence
Norman Olsen, Sexsmith	\$53.50	Buying uninspected whitefish.	
Emil Arac, Calais	\$28.50	Selling uninspected whitefish.	
Albin Stupak, Plamondon	\$27.50	Illegal possession of fish.	
Alphonse Touronjeau, Beaver Dam	\$5.00	Illegal possession of whitefish.	
Charles Pinsky, Cold Lake	\$29.00	Obstructing a Fishery Officer.	
John Rodgers, Villeneuve	\$31.40	Illegal possession of whitefish.	
E. B. Ponton, Edmonton	\$14.00	Operating improperly marked nets.	
Lorne Hiils, Sundance	\$8.00	Operating gill-nets other than licensee.	
Max Hanna, Armada	\$18.50	Transporting fish in unsanitary state.	
Bud Hornberg, Lomond	\$18.50	Transporting fish in unsanitary state.	
Charles Dunkley, Calgary	\$17.50	Transporting fish in unsanitary state.	
Werner Schmidt, Spruce Grove	\$8.00	Snaring fish.	
Calvin Ulmer, Spruce Grove	\$8.00	Snaring fish.	
Rudy Goertz, Spruce Grove	\$8.00	Snaring fish.	
Albert Schultz, Spruce Grove	\$8.00	Snaring fish.	
Edward Bauman, Fisher Home	\$13.50	Operating gill-nets in closed waters.	
Edward Bauman, Fisher Home	\$13.50	Fishing without a license.	
Wm. Potts, Mameo Beach	\$11.00	Operating overyardage gill-nets.	
Phillip Lightning, Mameo Beach	\$11.00	Operating overyardage gill-nets.	
W. Richards, Ohaton	\$8.50	Fishing with a spear.	
L. C. Sauvi, Camrose	\$8.50	Fishing with a spear.	
A. W. Cappis, Ohaton	\$8.50	Fishing with a spear.	
H. A. Cappis, Bawlf	\$8.50	Fishing with a spear.	
R. Crawford, Kelsey	\$8.00	Fishing with a spear.	
D. Carstairs, Ohaton	\$10.00	Fishing with a spear.	
J. Crawford, Kelsey	\$11.00	Fishing with a spear.	
Earl Mann, Lac La Biche	\$12.00	Fishing in closed area with gill-net.	
William Hunter, Gap Lake	\$24.00	Fishing in closed season (angling).	
J. Wittwer, Stettler	\$13.50	Fishing with a snare.	
E. Repp, Stettler	\$13.50	Fishing with a snare.	
E. C. Knechtell, Alix	\$8.50	Buying and selling fish without license.	
James Allan, Alix	\$8.50	Buying and selling fish without license.	
Allan Shorrock, Eckville	\$7.50	Snaring fish.	
Laurence Osberg, Eckville	\$7.50	Snaring fish.	
Thomas Lauristen, Eckville	\$7.50	Snaring fish.	

## Technical Division

*Report of the Director of the Technical Division  
T. W. Dalkin*

The wisdom in allowing a full year after the passing of the two acts to create a new Department of Lands and Forests and a new Department of Mines and Minerals by the division of the old Department of Lands and Mines is fully appreciated for when the 1st day of April, 1949, dawned and the Department of Lands and Forests was proclaimed, all was in readiness to insure the smooth continuation of business. In the creation of the Department of Lands and Forests the staff and records of this Division were affected to the extent that the Mineral Taxation Branch became a Division of the Department of Mines and Minerals and certain records and plans of the Technical Division were taken over by the Technical Division of the Department of Mines and Minerals.

Since the inception of The Mineral Taxation Act in 1931 the revenue and records have consistently grown and there is such abundant evidence that it does not take a prophet to foretell that they will continue to do so in the years to come under the Department of Mines and Minerals.

During that full year of grace there was, as usual, great activity in the oil industry which recorded new oil discoveries and it is a great source of satisfaction that many plans were prepared showing mineral rights over large areas and also plans showing the well locations in the new producing areas. These plans were transferred to the Technical Division of the Department of Mines and Minerals and no doubt would, in some small measure, be a factor to send it off to a good start.

To our old associates in the Department of Mines and Minerals our best wishes for success.

## AERIAL SURVEY

In submitting this, the first annual report, attention is called to the fact that on different occasions in the previous reports of the Department of Mines and Minerals reference was made to the great technical progress in the preparation of topographical maps from aerial photographs and the necessity of commencing a photographic library of our own. Later, maps appeared in these reports showing the extent and scale of the aerial photography undertaken by the Dominion Government, which is well supplied with equipment in the way of planes, cameras and other instruments and also has the services of the Royal Canadian Airforce at its command. It, therefore, seemed logical and economical for the Province to negotiate with the Dominion Government to take care of our aerial survey requirements. As the years passed by it soon became evident that this arrangement between the two governments was not working out satisfactorily partly because the senior government was, more or less,

harassed by requests from all the Provinces at the same time and could not begin to meet all these assignments and partly because the Province felt it was not keeping abreast of the feverish oil exploration concentrated within the boundaries of the Province. It obviously became the duty of the Province to take the lead and it is with a certain amount of pride that we point to the agreement between the Province of Alberta and the Photographic Survey Corporation Limited of Toronto, and which agreement is attached to Order in Council No. 1138/49.

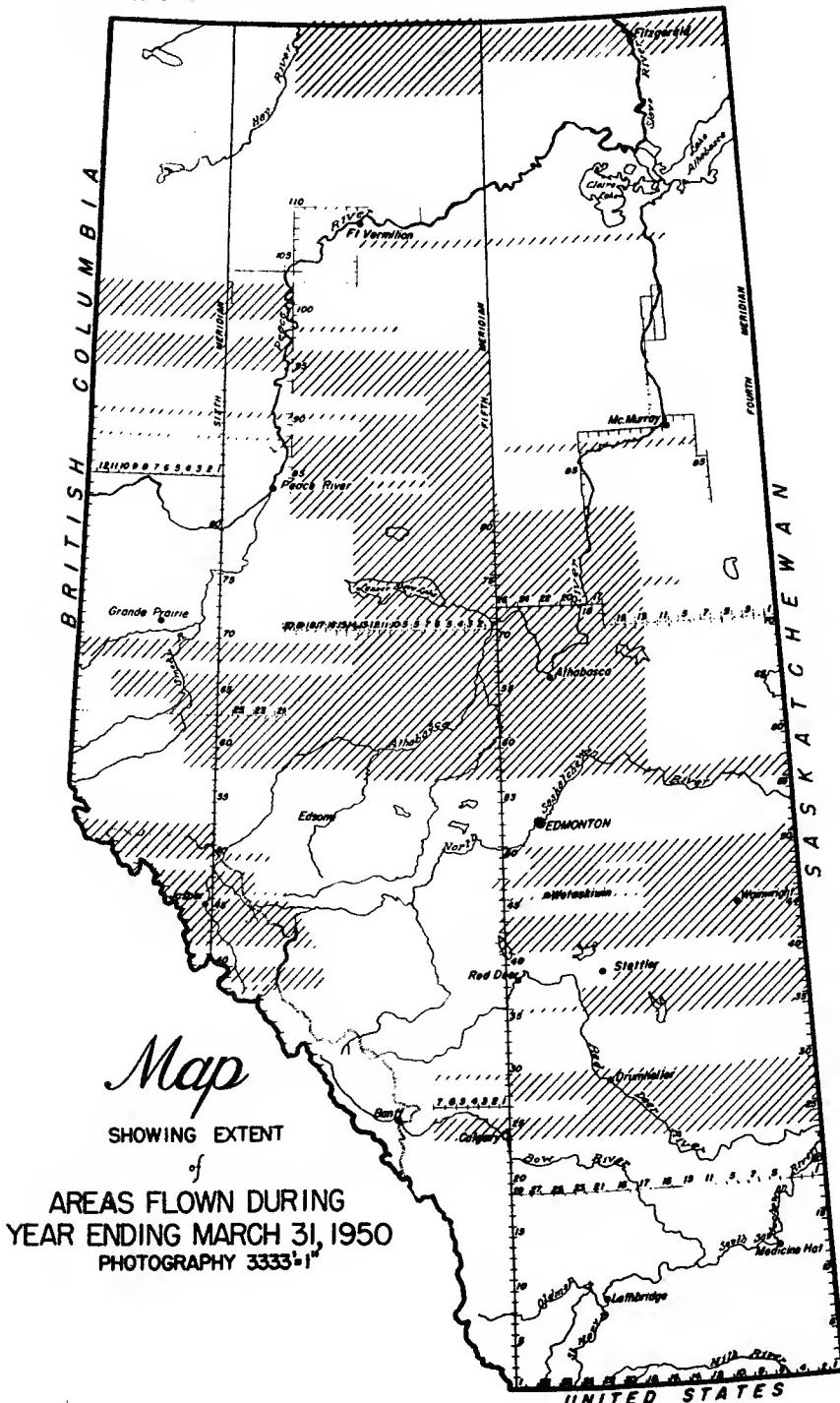
This agreement, which has been duly signed and sealed, provides for an aerial photographic survey of the whole of the Province, upon a scale of 3333' to 1" and the delivery of prints upon this scale and also maps upon a scale of 1" to 1 mile. The agreement further provides for an aerial photographic survey on a scale of 1320' to 1" of certain forested areas not exceeding 60,000 square miles and the delivery of prints upon this scale and forest inventory maps on a scale of 1" to 1 mile.

Copies of these prints and plans will be available to all companies engaged in the oil, mining and lumbering industries and all others interested in the development of our natural resources. This material will prove of immense value as it will cover the unexplored and unsurveyed regions through the North where the search for oil is now relentlessly proceeding. Each print on the scale of 3333' to 1" gives a pictorial coverage of about 32 square miles and a stereoscopic coverage of 9 square miles. The 1320' to 1" photography, which is, of course, on a much larger scale gives a pictorial coverage of 5 square miles and for stereoscopic coverage of 1½ square miles.

The wealth of information in these photographs and plans will, of course, be at the disposal of all the Departments throughout the Government and undoubtedly the engineers, surveyors, inspectors and assessors will save much time and money on the various projects to which they may be assigned.

Under the agreement with the Photographic Survey Corporation Limited of Toronto, it is estimated that about 30,000 contact prints will be required to cover the whole of the Province with 3333' to 1" photography. Fortunately the Province, renowned for its sunshine, enjoyed ideal fall and Indian summer weather so that excellent flying conditions prevailed to permit splendid progress before the snow began to fall with the result that over 6,000 prints were deposited in our photographic library, representing an area of 56,100 square miles. This amount represents about a fifth of the area of the Province and the areas flown can be located from the map submitted with this report.

## NORTHWEST TERRITORIES



It should be pointed out that in areas where Dominion Government photography of 1320' to 1" is available in the forested areas, in the interests of economy these areas are not being reflown by the Province as the prints are purchased from the Dominion Government at reasonable departmental service rates.

A total of 22,596 prints of the Dominion photography, at a scale of 1320' to 1", has been purchased covering an area of 17,530 square miles.

It is, therefore, with a certain amount of satisfaction to record that a very important step forward has been made since 1944, when the first reference was made in the Technical Division's annual report to aerial photography. During the war the United States airmen photographed a certain portion of the Province which lies roughly to the north and west of the line drawn from Grande Prairie to Chipewyan. At that time the trimetrogon method was used which enables the flyer by using three cameras at the same time to photograph the ground below from horizon to horizon. A complete set of all the photographs in the aerial flight over Alberta was received through negotiations with the Director of Photography in Washington, D.C. These photographs can be regarded now as somewhat historical as they now form an interesting collection of photographs in our expanding photographic library.

This library has been established not only for the use of all government departments, but also as a public service to all commercial concerns and private citizens who are interested in the welfare of the Province and also to the farmer who may be interested in what his land looks like from the air. A cordial invitation is issued to everyone to make use of the free facilities in this library where courteous attention is assured and prints of the photographs may be obtained at reasonable charges.

In the contract for the aerial surveys reference is made to "control". This is part of the work that must be established by survey upon the ground so that in the preparation of the maps from the photographs the areas can be tied into definite geographical locations. Fortunately large areas of Alberta have been surveyed so that there will be no difficulty in these areas, but in the northern parts of the Province there are still great regions of unsurveyed areas where the surveyor has not yet set foot. Luckily this problem is being solved by the co-operation of the Topographical Surveys in Ottawa and assurances have been given that certain traverses will be run in the North West corner of the Province, near the British Columbia boundary, after which negotiations will be entered into to complete the survey of the boundary between Alberta and British Columbia, the boundaries of the Wood Buffalo National Park in the North East corner of the Province and also the survey of the North boundary of the Province.

At a time when prosperity is running high and personnel not readily available, the situation is aggravated by the fact that it is difficult to obtain qualified men in this comparatively new field. As Ottawa has an excellent organization already established, arrangements were made, with the very kind consent

of the Director of Topographical Surveys in Ottawa, to send one of our draughtsmen to Ottawa for a three months intensive and comprehensive study, on the understanding that that knowledge would be available to our other draughtsmen and so train our own staff. By following the policy and by employing a minimum of additional qualified staff when available, it is hoped to start this new and most interesting Branch off on an efficient basis in order to cope with the problems that are bound to arise.

### LAND SURVEYS

During the last few years there have been many applications to have lands surveyed and made available for settlement, the most pressing of all being from the Peace River area.

Every endeavour has been made to obtain the services of qualified Alberta Land Surveyors, but so far without success. Special advertisements were run in the papers but no applications were received. It is the same old story, there are just not enough surveyors to go around to cope with the great volume of work that has accumulated during the war and further rocketed to unusual proportions by the oilboom now prevailing. There is fortunately a gleam of hope for next year's survey programme in that one of the Dominion Government surveyors will reach retirement and it is hoped that he can be persuaded to help us out of our predicament. In the meantime to all requests for surveys the answer regrettably is "no".

### TITLES GRANTED TO CROWN LAND

Since October, 1930, when the natural resources were returned to the Province by the Dominion, notifications have been issued covering an area considerably over 4 $\frac{1}{4}$  million acres of crown land. The exact amount is 4,721,765.3649 acres for which certificates of title have been issued upon the registration of the notifications in the Land Titles offices. The bulk went to homesteaders and more recently to the lessees of homestead leases which were issued when the policy of granting homesteads was discontinued on March 24th, 1939. In this age of socialization it is interesting to record that there seems to be a certain amount of genuine satisfaction apparent among these people to secure a title to those small portions of our Province upon which they have laboured and pioneered to create a home of their own.

Titles to the balance of this somewhat formidable acreage of land were granted to purchasers of land including school lands, railway companies and other public and private companies and in a much lesser degree, to school boards, school divisions, for school sites and to various religious organizations for church and cemetery sites.

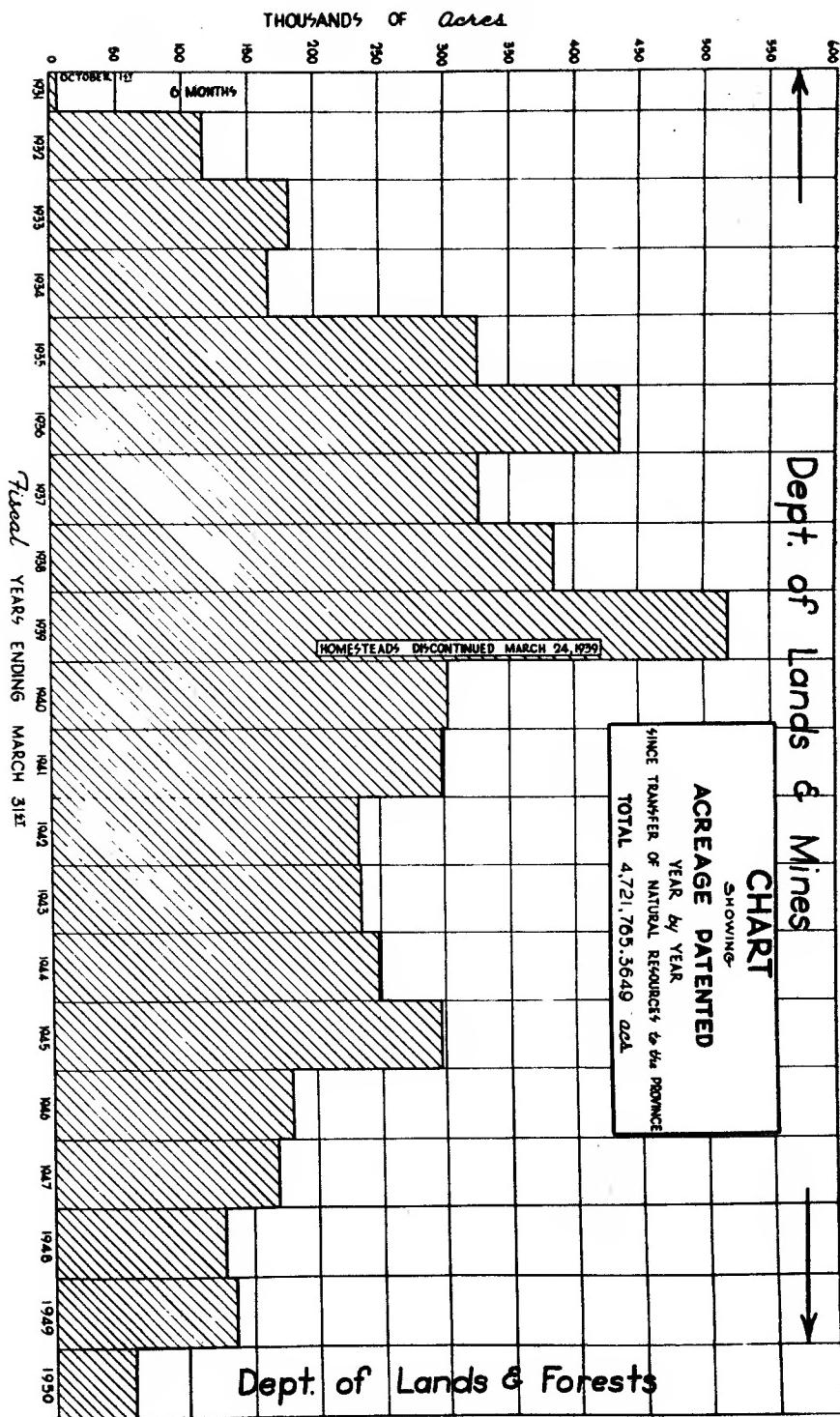
It must not be overlooked, however, that large tracts of land in this acreage were set apart, in accordance with the Natural Resources Agreement for Indian reservations, titles to which, included all mines and minerals and these may prove a very valuable asset to the Indians in view of the oil discoveries in Alberta.

Up to March 31st, 1949, new reservations and additions to existing reservations have been set apart and titles granted, particulars of which are as follows:

Names and Numbers of Indian Reserves	Date Patented	Area (Acres)
Chipewyan Indian Reserves Nos. 201, 201A, 201B, 201C, 201D, 201E, 201F, 201G .....	20*12*37	52,398.20
Addition to Janvier Indian Reserve No. 194 .....	15*6*43	514.00
Suncild Indian Reserve No. 202 .....	23*9*48	12,894.00
O'Chiese Indian Reserve No. 203 .....	23*9*48	34,287.00
<b>TOTAL .....</b>		<b>100,093.20</b>

Two new reservations, the Bushe River Indian Reservation No. 207 and the Moose Prairie Indian Reservation No. 208 have been granted this year, and reference to them will be made later in this report.

During the fiscal year under review there were 407 notifications issued covering an area of 58,219.184 acres. This reveals a decided drop from the previous year, when 635 notifications were issued covering an area of 136,568.7089 acres. In fact, looking at the chart included in this report, it will be seen at a glance, that with the exception of 1931, which represents only a part of a year when the administration of the resources was just beginning to function, this year can be considered the all-time low, as against 1939 the all-time high. The reason may be attributed to the fact that the policy of granting homesteads was discontinued in 1939, and practically all of the homesteads have now been patented.



NOTIFICATIONS ISSUED DURING FISCAL YEAR, APRIL 1, 1949 TO MARCH 31, 1950  
(For Surface Rights)

Classification	Notifications (Number)	Area (acres)
Homesteads .....	94	14,272.20
Sales (Including Lots in Subdivisions) .....	101	4,982.896
Second Homesteads .....	5	800.00
North-West Half Breed Grants .....	1	80.17
*Special Grants .....	9	13,132.39
Exchange of Lands .....	6	951.15
School Land Sales (Including Lots in Sub- divisions) .....	120	10,761.818
Release of Habendum .....	2	31.90
Homestead Sales .....	69	13,206.66
	407	58,219.184

NO. OF SALES IN SUBDIVISIONS WHICH ARE INCLUDED IN THE 101  
NOTIFICATIONS REFERRED TO ABOVE

	Notifications	No. of Lots	No. of Blocks
Cannmore—39 Gen.....	22	28	8
Coleman—6808 C.U. ....	2	2	2
Donnelly—204 C.L. ....	1	1	1
Grandview—1109 B.F. ....	1	1	1
Hillcrest—4735 A.Q. ....	1	2	1
Jarvie—37 Gen. ....	1	3	1
Manyberries—7345 B.O. ....	1	1	1
Maple Leaf—6632 Y. ....	1	4	4
Stirling—4347 Y. ....	13	230	13
Thornton—1035 A.R. ....	1	1	1
Waiporous—3046 E.X. ....	2	3	1
Willingdon— .....	2	2	1
Total .....	48	278	35

SUBDIVISIONS INCLUDED IN THE 120 NOTIFICATIONS ISSUED UNDER  
SCHOOL LAND SALES

	Notifications	No. of Lots	No. of Blocks
McLennan Townsite—1394 E.U. ....	2	2	1
Minnehik—1332 H.W. ....	49	61	7
Total .....	51	63	8

TOTAL NO. OF NOTIFICATIONS ISSUED COVERING LOTS AND BLOCKS  
IN SUBDIVISIONS

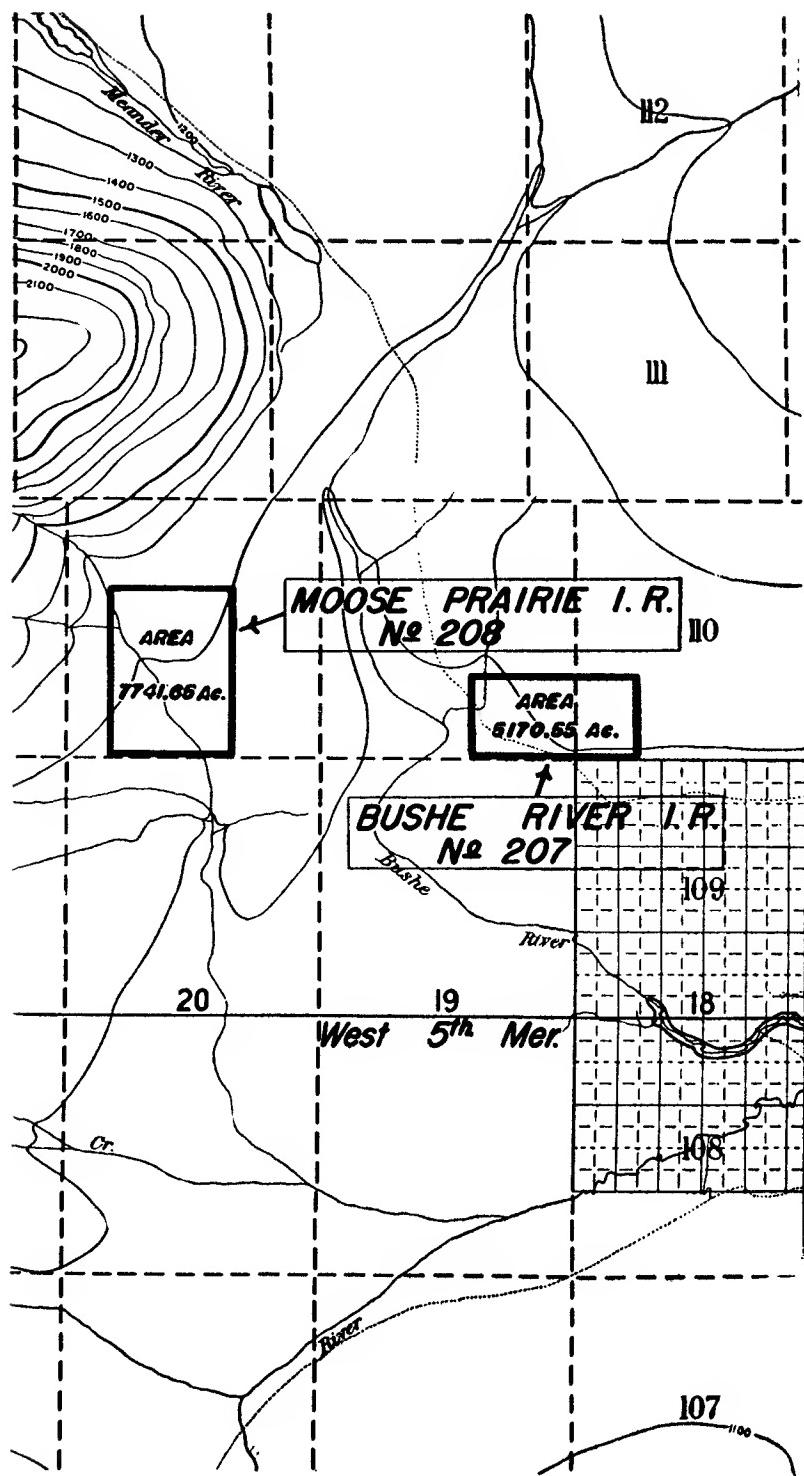
	Notifications
Sales .....	48
School Land Sales .....	51
	—
Total .....	99
Total No. of Notifications issued giving area....	308
	—
Total No. of Notifications .....	407

One reserve is known as the Bushe River Indian Reserve No. 207, located in Township 101, Ranges 18 and 19, West of the 5th Meridian and contains 5,170.55 acres. This reservation was granted under the authorization of Order in Council No. 816/49.

The other reserve is known as the Moose Prairie Indian Reserve No. 208, and is located in Township 110, Range 20, West of the 5th Meridian, and containing 7,741.65 acres. This reservation was granted under the authorization of Order in Council No. 817/49.

Representations have been made by Ottawa for the creation of further Indian reservations for the Hay River Bands of Indians and further information in this regard will appear in our next annual report.

\* Included in the special grants are the two new Indian reserves which were granted for the Hay River Bands of Indians.



**TAX RECOVERY AND REVESTED LANDS**  
**(Outside Special Areas)**

A total of 35,599.1389 acres of tax recovery and revested lands were acquired during this fiscal year, particulars of which are as follows:

	As on March 31, 1949	From April 1, 1949 to March 31, 1950	Total to March 31st, 1950
	Acres	Acres	Acres
TAX RECOVERY .....	789,122.79	30,809.6709	819,932.4609
REVESTED .....	467,075.90	4,789.4680	471,865.8680
<b>TOTAL .....</b>	<b>1,256,198.69</b>	<b>35,599.1389</b>	<b>1,291,797.8289</b>

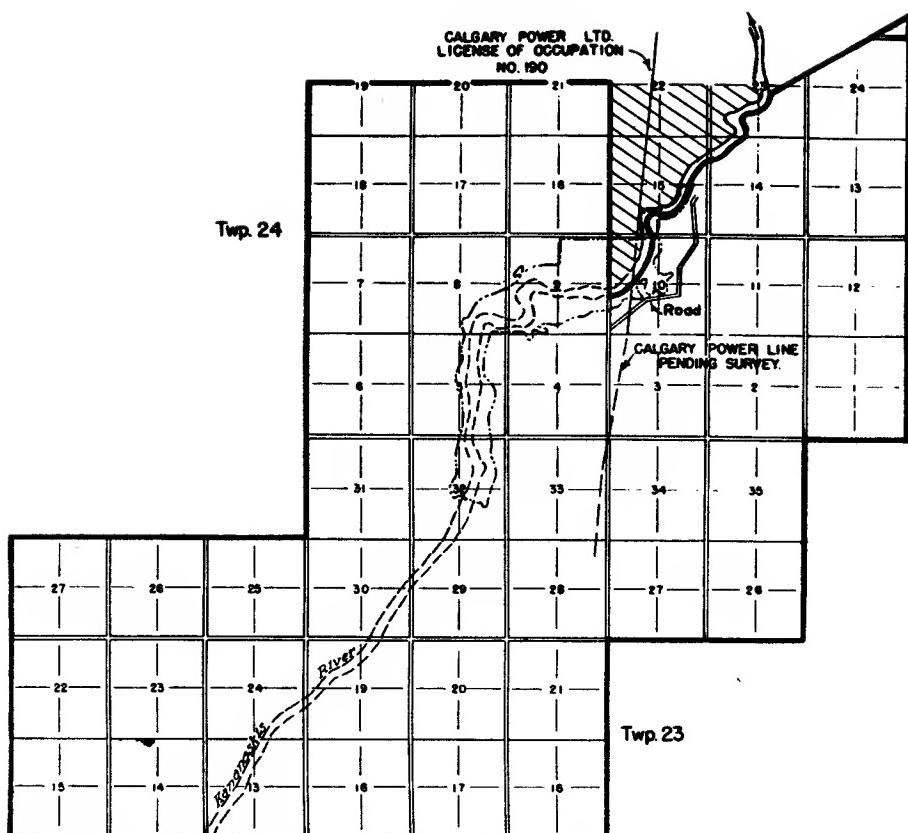
**BOUNDARIES BETWEEN ALBERTA AND BRITISH  
COLUMBIA AND THE NORTH WEST TERRITORIES**

It may not be generally known that the Northern boundary of our Province has not been surveyed nor has that part of the boundary between Alberta and British Columbia extending for about 173 miles from the northern boundary of Township 97 to the North West corner of the Province. The necessity of these surveys was realized when the question of ground control was discussed in connection with the aerial survey of the Province now under way. The necessity was further emphasized on account of the search for oil being pushed farther and farther to the North and West. Satisfactory arrangements were made with the Dominion and British Columbia Governments which resulted in the passing of "The Boundary Surveys Act" in 1950. This permitted the Province to enter into an agreement with Canada and British Columbia on a partnership basis for the surveying and demarcation of these boundaries.

**KANANASKIS EXPERIMENTAL STATION**

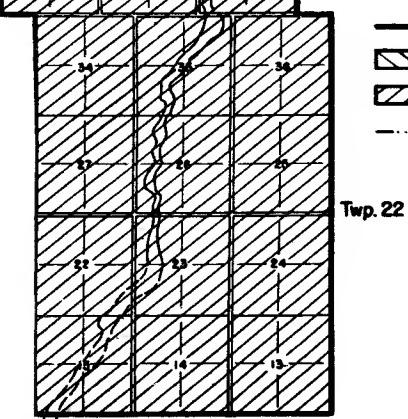
On November 6th, 1934, an Order in Council No. 973/34 was passed whereby certain lands in the then Bow River Reserve were set apart at the request of the Dominion Government for forest experimental purposes and a special grant was issued on November 14th, 1934. The Dominion Government received title for an area comprising 40,558 acres, with the mineral rights being retained by the Province.

Certain coal areas, however, were found to be located within these boundaries, including the Barrier Development of the Calgary Power Company. As it was realized that the proper development of our natural resources must not be impeded it was essential that the boundaries of the experimental station be revised. Negotiations with Ottawa have reached a satisfactory stage but it is apparent that until the necessary surveys are made, no further progress can be made for the transfer of the present area back to the Province and the issue of a new notification to the Dominion Government of the revised area.



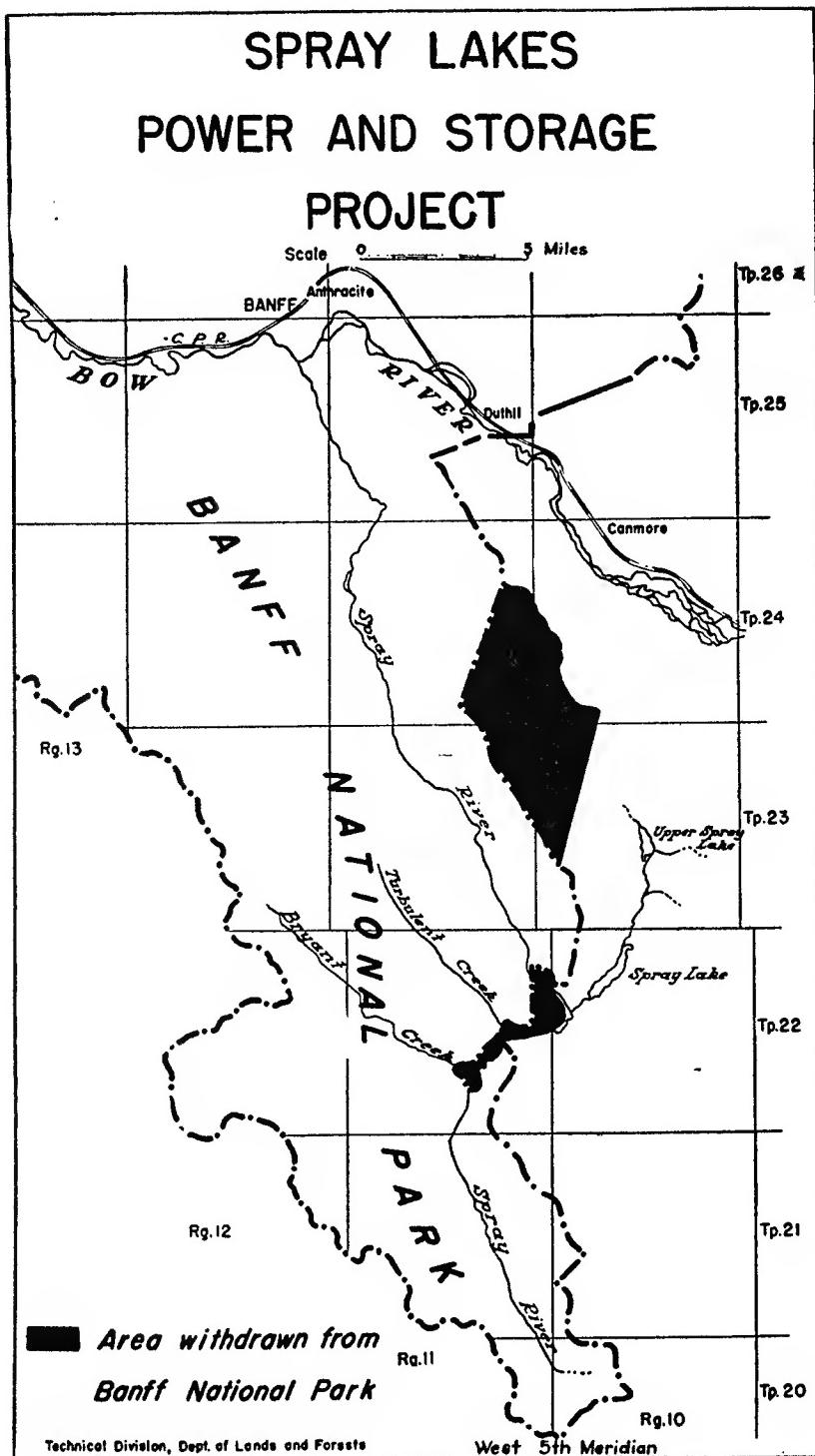
### KANANASKIS EXPERIMENTAL STATION

- PRESENT BOUNDARY.
- ▨ PROPOSED ADDITIONAL AREA.
- ▨ PROPOSED DELETION.
- - - BARRIER POWER DEVELOPMENT.



**SPRAY LAKES POWER AND STORAGE PROJECT**

After consultation with Ottawa it was found desirable that the areas required for this project should be withdrawn from the Banff National Park and transferred to the Province. This was accomplished by Ottawa passing The National Parks Amendment Act, 1949. It is the intention of the Province to pass complementary legislation to coincide with the Dominion Act and place these areas containing 21.20 acres, under the jurisdiction of the Eastern Rockies Forest Conservation Board.



### LOGGING ROADS

In last year's report reference was made to the number of logging roads that have been built in connection with timber operations, and in the past have not been recorded by the Department. Plans were accordingly prepared, showing the locations of all the logging roads which were covered by licenses of occupation issued by the Department. These were forwarded to the Forestry field men to mark the locations of existing logging roads, that were being used in connection with lumber operations, and for which no applications had been received in the Department to use the Crown land. Plans are now being received in this Division and the information is being transferred, by means of plans and descriptions, to the Director of Lands, who will provide the various companies an opportunity to establish their rights by means of a license of occupation, or have an action brought against them for trespass.

The steady demand for lumber was reflected in the number of new licenses of occupation issued for logging roads.

### SURVEYED ROADS

There was a decided drop in the number of plans of survey received from the Department of Public Works and Municipal Districts for road diversions passing over Crown lands. Only 23 plans were received affecting 90 quarter sections of Crown lands.

### ROAD ALLOWANCES

Statutory road allowances are under the jurisdiction of the Department of Public Works and because of this fact it was necessary for lessees of Crown lands from this Department to acquire the adjoining road allowances by lease from the Department of Public Works. It was discovered, particularly on ranches, which had been in existence for years, that road allowances had been fenced in without first obtaining authority from the Department of Public Works. Therefore, arrangements were made with the Department of Public Works granting to this Department the authority to lease the road allowances, not required for public travel, in the area lying to the South of Municipal Districts No. 52, 53, 54, 55, 56 and Improvement District No. 58 but excluding those within the boundaries of the special areas. An applicant or lessee of Crown lands can now apply direct to this Department to acquire the adjoining road allowances. This Division is preparing legal descriptions of the fenced-in road allowances concerned.

### FORESTRY

While Mr. Wallace A. Delahey, a forest engineer from Toronto, was engaged on a special survey of the forested areas of the Province it was our pleasure to work in co-operation with him. Maps of various descriptions and areas were prepared showing the extent of the alienation of the timbered lands. Other maps which showed the extent of the destruction by fire were

somewhat impressive as to the devastation that had been wrought over the last two decades.

### REVISION OF 16-MILE MAP

Our 16-mile map of the Province is undoubtedly the most popular publication in our stock, as shown by the continued demand not only from our Province but throughout the Dominion and the United States of America. Requests also continue to come in from overseas and there is no doubt that this map is now available in many libraries outside of Canada. It is a handy map, measures 32" x 52" and sells for 60c, and for \$2.25 when mounted on linen with half rounds top and bottom to hang on the wall. The map shows by sections, townships and ranges all the lands surveyed as well as railways, highways, trails, irrigation canals, ferries, cities, towns, post offices, railway stations, Hudson's Bay posts, settlements, forestry and commercial radio stations, Dominion Government telegraph lines, provincial airports, provincial and national parks, forestry reserves and Indian reservations, etc.

As the stock of this map is again running low it is now being revised so that it will be brought right up to date. It is hoped that the work of revision will be completed so that the new issue will come off the press next year.

### MAP SHOWING LANDS OPEN AND WITHDRAWN FROM SETTLEMENT

This map is a reduction of our 16-mile map showing in green the lands withdrawn from settlement and in yellow, the lands open for settlement. As it was a reproduction of a former issue, it was necessary to alter the boundaries of these areas before a new issue was run off the press this year. Whilst this is a useful map in a general way, it can only be regarded as a key map enabling a settler to see at a glance the line of demarcation between settlement and closed areas. The object of the closed areas is to protect our forested areas and this policy was generally lauded as a wise step in forest conservation.

### MAP SECTION

The popularity of our map section increases with the passing years and this is accentuated with the present prosperity in our Province. People in all walks of life within and without our Province call to select maps according to their requirements. The settler who carries away a map upon which he has located a possible homesite is assured of the same courteous attention as is given to the lumber, oil and industrial executives, who play such a large part in the development of our resources.

Apart from the large sale of our Provincial maps the sale of the Dominion publications has also mounted. The writer believes the Province is one of the Dominion's best customers for maps.

Some time next year our 1" to-the-mile maps, available under the agreement referred to earlier in this report under the aerial survey, will begin to make their appearance and these will be awaited with great interest. With the plans and the photographs of all the lands within the boundaries of the Province available it is felt that this Division will be in a position to render a still greater service to the Public.

To be of still further service, it is our hope to produce mosaics from our aerial photographs which will not only be of value to the oil, lumber, farming and other industries, but also to the municipalities and government agencies. To the laymen may it be explained that a mosaic is a composite picture on a true scale, made up from a number of aerial photographs. This mosaic is then rephotographed and affords a bird's eye view of any desired areas, large or small, from which can be discerned all the topographical features useful to industrialists, government departments and municipalities in the projection of engineering, town planning and other development and exploratory schemes.

#### GENERAL DRAUGHTING, CHECKING OF PLANS AND LEGAL DESCRIPTIONS

Although it is still difficult to obtain experienced draughtsmen, the volume of draughting and miscellaneous work shows no abatement. Indeed, it seems to be on the increase due in part to the fact that all rights of entry plans showing surveys affecting Crown lands that are required by industries for well sites and access thereto, pipe line rights-of-way, and other industrial purposes, are checked before presentation to the Right of Entry Arbitration Board.

In other miscellaneous items it can be reported that a number of exchanges of lands were accomplished for the benefit of settlers. The photostat and mimeograph machines maintained a steady pace.

Despite the vacancies that still appear upon the staff list, a successful year can be reported and this, in a great measure, is attributable to the loyal co-operation and conscientious application to duty of the members of the Technical Division staff, to whom a tribute is herein recorded upon celebrating our first birthday under the new banner of Lands and Forests.

## Accounting Division

### REPORT OF THE SECRETARY-ACCOUNTANT, A. McCALLUM

By Order-in-Council 616/49 the Department of Lands and Forests was established as of April 1st, 1949. This report, therefore, will reflect the first year's operations of the new Department for the fiscal year ending March 31st, 1950.

A surplus of \$1,300,056.44 on Income Account was shown for the year under review.

Gross Receipts from all sources amounted to \$4,184,862.12. Net Revenue amounted to \$3,555,075.01.

Net Revenue on Income Account was \$3,009,163.67 as compared to an estimated revenue of \$2,263,525.00.

For the year under review, refunds to the taxing authority as covered by The Crown Cultivation Leases Act and the Grazing Lease Taxation Act amounted to \$366,020.77. Refunds in the amount of \$67,426.94 were made to the taxing authority under The Tax Recovery Act.

As at March 31st, 1950, there were 12,181 accounts receivable as follows:—

	No. of Accounts
School Land Sales .....	616
Public Land Sales .....	141
Tax Recovery Sales .....	21
Accrued Area Leases .....	680
Homestead Lessees .....	4,222
Public Land Cultivation Leases .....	418
School Land Cultivation Leases .....	1,466
Tax Recovery Cultivation Leases .....	196
Grazing Leases .....	1,918
Lands Miscellaneous Leases .....	599
Timber Berths, Rental and Royalty .....	1,532
Special Timber Permits .....	372
	<hr/>
	12,181

The number of new accounts opened were 1,514. Accounts cancelled, closed or paid in full were 1,639.

The number of cash entries entered in the cash books was 44,211. The number of general receipts, permits, etc., issued for this fiscal year was 36,123.

Disbursements on income account amounted to \$1,709,107.23. Details of expenditure may be found in Statement D.

Firefighting costs for the fiscal year amounted to \$266,261.66.

Bounties paid for the destruction of pests amounted to \$30,197.23.

Capital expenditure amounted to \$377,103.03, of which \$289,521.63 was in connection with the land settlement scheme in the Wanham District for clearing and breaking land. Under an agreement entered into by the Province with the Photo-

graphic Survey Corporation of Toronto, Ontario, (O.C. 1338/49,) an amount of \$81,075.24 was disbursed.

Under the Eastern Rockies Forest Conservation Agreement, an amount of \$206,697.18 was disbursed on maintenance account of which the Province contributed \$171,354.77. Capital expenditure for the year was \$1,509,613.48 for which the Province received full reimbursement as provided by the agreement.

#### INDEX TO STATEMENTS

- A.—Statement of Receipts from all Sources.
- B.—Statement of Receipts—Income Account.
- C.—Statement of Receipts—Capital Account.
- D.—Statement of Expenditure for the year ending March 31st, 1950.
- E.—Statement of Net Receipts by Branches.
- F.—Statement of Receipts—School Lands.
- G.—Alberta School Land Trust Fund.
- H.—Alberta School Land Sales—Revenue Account.

#### STATEMENT OF RECEIPTS FROM ALL SOURCES From April 1, 1949 to March 31, 1950

	STATEMENT A.		
	Gross Receipts	Refunds	Net Receipts
Income Account .....	\$3,489,191.51	\$480,027.84	\$3,009,163.67
Capital Account .....	118,040.78	972.81	117,067.97
Reimbursement of Previous Year's Expenditure .....	6,362.15	130.00	6,232.15
School Lands Trust Fund .....	255,423.69	413.60	255,010.09
Homesteader's Compensation Trust .....	545.25	75.00	470.25

#### UNAPPLIED RECEIPTS CARRIED FORWARD (Subject to Refund)—

Suspense .....	158,958.56	84,874.98	74,083.58
Tax Recovery .....	82,974.79	62,272.14	20,702.65
Improvements .....	4,650.59	1,020.74	3,629.85
Land Patent Cultivation Crop Share .....	3,477.85	.....	3,477.85
Land Patent Homestead Lease Crop Share .....	10,797.58	.....	10,797.58
School Lands Cultivation Crop Share .....	16,856.29	.....	16,856.29
Grazing Rentals, Fees, etc. .....	37,583.08	.....	37,583.08

\$4,184,862.12      \$629,787.11      \$3,555,075.01

## STATEMENT B

## STATEMENT OF RECEIPTS INCOME ACCOUNT

From April 1, 1949 to March 31, 1950

## INCOME ACCOUNT:

	Gross Receipts	Refunds	Net Revenue
<b>FISHERIES ACT:</b>			
Fishing Licenses .....	17,140.00	20.00	17,120.00
Angling Permits .....	36,983.70	11.30	36,972.40
Boat Licenses .....	185.00	.....	185.00
Fisheries Miscellaneous .....	590.04	.....	590.04
Fisheries Royalty .....	12,861.36	.....	12,861.36
<b>GAME ACT:</b>			
Game Licenses .....	195,913.07	174.00	195,739.07
Trap Line Permits .....	28,230.00	80.00	28,150.00
Fur Tax .....	119,932.40	3,265.78	116,666.62
Sale of Fur .....	2,033.92	699.76	1,334.16
Game Branch Miscellaneous .....	480.93	.....	480.93
<b>LANDS AND GRAZING:</b>			
Grazing Leases, Permits, etc. ....	473,227.97	136,323.84	236,904.13
Hay Permits, Fees and Dues .....	10,642.70	1,098.00	9,544.70
Homestead Leases .....	78,669.26	41,563.89	37,105.37
Improvement Collection Fees .....	571.95	.....	571.95
Provincial Lands Sales Interest .....	1,798.59	.....	1,798.59
Cultivation Leases, Permits, etc. ....	77,646.92	61,751.71	15,895.21
Surface Rentals .....	5,287.29	.....	5,287.29
Fur Farms .....	387.65	.....	387.65
Land Patent Miscellaneous .....	45,221.90	6,202.13	39,019.77
<b>TIMBER:</b>			
Timber Fees, Rental, Dues, etc. ....	1,587,046.62	39,819.95	1,547,226.67
Timber Miscellaneous .....	10,012.30	48.61	9,963.69
<b>SCHOOL LANDS:</b>			
School Land Sales Interest .....	23,886.06	.....	23,886.06
School Land Leases, Berths, Permits, etc. ....	468,665.14	176,084.25	292,580.89
School Land Miscellaneous .....	19,797.46	382.85	19,414.61
<b>UNEARNED INCREMENT TAX:</b> .....			
14,485.69	1.72	14,483.97	
<b>EAST SLOPE SURFACE RIGHTS REV- ENUE:</b> .....			
183,406.29	12,051.52	171,354.77	
<b>CLEARING AND BREAKING PROJECT—</b>			
SEED GRAIN INTEREST: .....	156.33	43.60	112.73
<b>MISCELLANEOUS:</b>			
Casual .....	8,613.54	203.67	8,409.87
Reimbursement of Salaries and Ex- penses .....	634.38	.....	634.38
House Rent .....	988.00	40.00	948.00
Services and Supplies .....	8,989.21	116.26	8,872.95
Photographic Survey .....	768.00	.....	768.00
Tax Recovery Office Fees .....	581.62	45.00	486.62
Photostat Prints .....	7,099.01	.....	7,099.01
Reimbursement from Dominion Gov- ernment re Eastern Rockies Con- servation Board .....	46,307.21	.....	46,307.21
<b>TOTAL INCOME ACCOUNT (Carried to Statement A)</b> .....	<b>\$3,489,191.51</b>	<b>\$480,027.84</b>	<b>\$3,009,163.67</b>

## STATEMENT C

## STATEMENT OF RECEIPTS CAPITAL ACCOUNT

From April 1, 1949 to March 31, 1950

	Gross Receipts	Refunds	Net Receipts
Land Sales Principal .....	\$85,367.64	\$840.62	\$84,527.02
Clearing and Breaking Project—			
Seed Grain Principal .....	3,995.43	112.10	3,883.33
Clearing and Breaking Project—			
Seed Grain Crop Share .....	28,677.71	20.09	28,657.62
	<b>\$118,040.78</b>	<b>\$972.81</b>	<b>\$117,067.97</b>



## STATEMENT D

Government of the Province of Alberta  
LANDS AND FORESTS DEPARTMENT  
EXPENDITURE CLASSIFIED BY APPROPRIATIONS AND CHARACTER  
For the Year Ended March 31, 1950  
INCOME ACCOUNT

Service	1901 Minister's Office	1902 Deputy Minister's Office	1903 Accounts Division	1904 Advisory Board	1905 Destruction of Pests	1906 Eastern Rockies Forest Conservation	1907 Fisheries Division	1909 Forest Protection and Timber Division	1910 Forest Survey Division	1911 Forest and Prairie Fire Suppression Act	1912 Game Division	1913 Eastern Rockies Forest Conservation Board	1914 Lands Division	1915 Parks Division	1916 Radio Communication	1917 Surveys Division	1918 Registration Division	1919 Postage	S.W. 38/49-50 Cost of drilling water well at forest ranger station, Slave Lake	Totals
Advertising .....	\$ 40.801.70																			\$ 5,638.61
Automobiles .....																				40.801.70
Board .....																				36,154.15
Books and Binding .....																				830.67
Bounties for destruction of pests .....																				30,197.23
Buildings and Sites .....																				14,086.76
Clothing .....																				10,776.19
Equipment .....																				88,436.72
Feed and seed .....																				3,396.34
Fees and commissions .....																				410.77
Fencing .....																				1,203.26
Freight, express and cartage .....	.75	19.53	71.91																	25,652.61
Heating, lighting and power .....																				5,742.69
Hospital and medical supplies .....																				67.98
Laundry and cleaning .....																				72.70
Miscellaneous expenses and supplies .....	7.55	22.35	1.44																	8,876.17
Newspapers and periodicals .....	25.00	40.00																		96.37
Postage .....	60.00																			11,888.79
Printing, Stationery and office supplies .....	171.34	4,184.04	3,350.01																	32,438.19
Rates, rentals and insurance .....		146.77																		88,143.86
Repairs and replacements .....	97.28	785.81	602.81																	68,188.43
Salaries .....	4,916.25	26,105.32	69,808.47																	913,171.26
Special services .....																				5,676.95
Surveys .....	379.86	220.58																		12,628.63
Telegrams and telephones .....			148.51																	3,992.80
Travelling expenses .....	287.87	1,204.69	324.95	584.86																4,497.10
Wages .....																				125,502.45
																				186,319.01
<b>TOTAL INCOME ACCOUNT .....</b>	<b>\$ 5,945.89</b>	<b>\$ 33,179.86</b>	<b>\$ 75,751.63</b>	<b>\$ 584.86</b>	<b>\$ 30,197.23</b>	<b>\$ 206,697.18</b>	<b>\$ 139,267.68</b>	<b>\$ 420,290.91</b>	<b>\$ 21,125.10</b>	<b>\$ 266,261.66</b>	<b>\$ 85,794.49</b>	<b>\$ 7,011.16</b>	<b>\$ 188,067.18</b>	<b>\$ 18,270.12</b>	<b>\$ 91,261.79</b>	<b>\$ 55,103.88</b>	<b>\$ 49,381.80</b>	<b>\$ 9,237.86</b>	<b>\$ 5,676.95</b>	<b>\$ 1,709,107.23</b>

## CAPITAL ACCOUNT

	1980 Land Settlement, Clearing and Breaking Land	S.W. 26/49-60 Photographic survey of the natural resources of the Province	Totals
Clearing and breaking land .....	\$ 289,521.63	\$ ..... 5.91	\$ 289,621.63
Freight, express and cartage .....	5.91	..... 91.35	5.91
Miscellaneous expenses and supplies .....	91.35	..... 10.00	91.35
Postage .....	10.00	..... 72.14	10.00
Rates, rentals and insurance .....	72.14	..... 257.48	72.14
Repairs and replacements .....	257.48	..... 4,009.00	257.48
Salaries .....	4,009.00	..... 81,075.24	4,009.00
Surveys .....	81,075.24	..... 8.89	81,076.24
Telegrams and telephones .....	8.89	..... 2,051.39	8.89
Travelling expenses .....	2,051.39	..... 2,051.39	2,051.39
<b>TOTAL: Capital Account .....</b>	<b>\$ 296,027.79</b>	<b>\$ 81,076.24</b>	<b>\$ 377,103.03</b>



## STATEMENT E

**STATEMENT OF NET RECEIPTS BY BRANCHES**  
**For the Fiscal Year Ending March 31, 1950**

**INCOME ACCOUNT:**

	Amount
Fisheries Branch .....	\$ 67,728.80
Game Branch .....	342,370.78
Lands and Grazing Branch .....	446,514.66
Timber Branch .....	1,557,190.36
Unearned Increment Tax .....	14,488.97
School Lands .....	335,881.56
East Slope Surface Rights .....	171,354.77
Clearing and Breaking Project—	
Seed Grain Interest .....	112.73
Miscellaneous .....	73,526.04
<b>CAPITAL ACCOUNT:</b>	
Land Sales Principal .....	84,527.02
Clearing and Breaking Project—	
Seed Grain Principal .....	3,883.33
Seed Grain Crop Share .....	28,657.62
TRANSFERRED TO OTHER DEPARTMENTS .....	6,232.15
SCHOOL LANDS TRUST FUND .....	255,010.09
HOMESTEADERS' COMPENSATION TRUST .....	470.25
<b>UNAPPLIED RECEIPTS CARRIED FORWARD:</b>	
Suspense .....	94,786.23
Improvements .....	3,629.85
Land Patent Cultivation Crop Share .....	3,477.85
Land Patent Homestead Lease Crop Share .....	10,797.58
School Lands Cultivation Crop Share .....	16,356.29
Grazing Rentals, Fees, etc. .....	37,683.08
	\$ 3,555,075.01

## STATEMENT F

**STATEMENT OF RECEIPTS—SCHOOL LANDS**  
**From April 1, 1949 to March 31, 1950**

	Gross Receipts	Refunds	Net Revenue
<b>INCOME ACCOUNT:</b>			
School Lands Sales Interest .....	\$ 23,886.06	\$ .....	\$ 23,886.06
School Lands Grazing Lease Rentals, etc. .....	34,027.51	172.38	33,855.13
School Lands Hay Permits, Fees and Dues .....	2,234.02	242.50	1,991.52
School Lands Cultivation, Rentals, Fees, etc. .....	380,744.21	173,393.92	207,350.29
School Lands Timber Rentals, Fees, Dues, etc. .....	51,659.40	2,275.45	49,383.95
School Lands Surface Rentals, etc. ....	4,260.66	.....	4,260.66
School Lands Fur Farm Rentals .....	10.69	.....	10.69
School Lands Miscellaneous Leases, etc.	15,526.11	382.85	15,143.26
	512,348.66	176,467.10	335,881.56
<b>TRUST ACCOUNT:</b>			
School Land Sales Principal .....	255,423.69	413.60	255,010.09
	\$ 767,772.35	\$ 176,880.70	\$ 590,891.65

## STATEMENT G

**ALBERTA SCHOOL LAND TRUST FUND**  
**Balance Sheet—March 31, 1950**

As at March 31, 1950, the fund amounted to  
\$12,688,711.04 made up as follows:

Cash .....	\$ 34,562.42
Accounts Receivable .....	136,208.97
Debentures of the Dominion of Canada:	
(a) Issued in settlement of the sum standing to the credit of the fund when the natural re- sources were transferred to the Province in October, 1930 .....	\$9,564,569.20
(b) Purchased by the Province since October 1, 1930, from payments of principal on school land sales, book value .....	2,287,821.96
	11,852,391.16
Unpaid principal on school land sales:	
(a) Not Due .....	659,288.34
Due or in arrears .....	6,265.15
	665,548.49
	\$12,688,711.04

## STATEMENT H

## ALBERTA SCHOOL LAND SALES—REVENUE ACCOUNT

From April 1, 1949 to March 31, 1950

Arrears Interest as at March 31, 1949 .....	\$14,097.67
Interest Charges .....	19,993.20
Interest Revenue .....	\$23,886.06
Interest Written Off—Re Cancelled Sales .....	.....
Arrears Interest as at March 31, 1950 .....	10,204.81
	\$34,090.87
	\$34,090.87

## Registration Division

### REPORT OF THE REGISTRAR, C. B. KENWAY

The work of this Division has not changed perceptibly since the former Department of Lands and Mines was split into the two new departments of Lands and Forests and Mines and Minerals. The most noticeable change occurred in the filing section of the division, where there was less staff in proportion to the amount of work having to be done.

As mentioned last year, records and files had been split long before the first of April, when the two new departments came into being. After separation, the material was handled by the staffs assigned to the respective departments, and no confusion arose when the actual split was made.

For five months previous to the split, this division kept a tally on all mail going to the various branches, in order to determine roughly, the number of staff that would be required to handle the mail after the split. The result was very close to an earlier estimate, slightly less than 15 per cent of the total incoming mail was dispatched to those branches to be included in Mines and Minerals and 85 per cent to those destined to be in Lands and Forests. The filling staff was handicapped during the first part of the year, as it had been reduced by a third, and not in the proportion suggested by the mail check. The "man on the street", having read the newspaper accounts of the contemplated split, got the impression it was a 50-50 split or even a greater percentage of the work being in the new Department of Mines and Minerals. The same impression was not uncommon even in government circles. Sometimes it is easy to overlook the fact that a five-dollar transaction might involve a good deal more work than one of a half million.

As mentioned in reports of other years, the incoming and outgoing mail is a fairly good barometer of business transacted. As this is the first year for which mail figures have been collected in the new department, it is not possible to give comparative figures, but there has been a marked reduction in the amount of incoming and outgoing mail from last year, even allowing for the reduction caused by the splitting of the old department.

NUMBER OF LETTERS RECEIVED AND MAILED FOR THE FISCAL YEAR 1949-50			
Month	Letters Received	Letters Mailed	Total
April .....	9,347	11,182	20,529
May .....	8,430	14,245	22,675
June .....	7,970	10,517	18,487
July .....	7,421	9,978	17,399
August .....	6,793	12,355	19,148
September .....	6,863	17,365	24,228
October .....	7,113	14,920	22,033
November .....	7,359	17,841	25,200
December .....	8,242	15,712	23,954
January .....	8,094	17,338	25,432
February .....	8,003	13,724	21,727
March .....	12,910	18,369	31,279
<b>TOTAL .....</b>	<b>98,545</b>	<b>173,546</b>	<b>272,091</b>

## RECORDS

There was a reduction in the amount of routine entering, which was in line with the reduced amount of mail. The extra time was readily utilized in checking the township registers for past discrepancies.

For the second year in succession, there have been marked decreases in the various types of entries. During the past year 356 assignments were registered against 439 for the previous year; 407 notifications for patents, against 635 and 489 reservations for forestry, against 526; the larger figure in each case being for the previous year. There was a slight increase in timber berth applications, 220 being received against 190 for the previous year.

The necessity for transcribing complete township registers is reaching the vanishing point, with only 5 registers being transcribed during the past year. Most of the registers are in loose-leaf form; the remainder are for outlying districts and contain very few entries. In addition, a number of individual pages from the loose-leaf books were transcribed.

## MICROFILMING

On November 10th, 1949, two Recordak belt-driven commercial machines were installed in the Recordak section of the branch. These machines were much faster than the old Recordak Junior, and although considerable trouble was experienced in getting them adjusted to run properly, 490 films were photographed before the end of the fiscal year. This figure is more than double the 215 files photographed during the previous year.

The new machines allow between 2,200 and 2,300 "shots" to be taken on each 100-ft. film, against 1,500 on the old type. This reduced by a third the cost of film and handling time. It is hoped that sometime, in the not too distant future, the division will be able to procure one RE-1 machine which has a much greater speed and takes about 3000 shots for each one hundred feet of film.

At the time this branch assumed the microfilming of files, about 2800 square feet of vault space was being used to house closed files. Today the closed files are stored in less than 500 square feet. This is a tremendous saving, when one considers that files are being closed daily, and that in the early post-war years, correspondence was accumulating at the rate of about two full filing cabinets each month.

## UNEARNED INCREMENT TAX

On the formation of the new department, the responsibility for administering the Registration of Assignments of Crown Lands Act was transferred from the Technical Division to this Division.

It was obvious from the outset that it is not a popular Act. One lawyer described the situation very clearly when he said

that 99 per cent of the people will try to be reasonably accurate when making out their income tax returns, but 99 per cent will try to evade the unearned increment tax, if it is possible to do so. His figures might be wrong, but it gives you the general feeling towards the Act.

The following table shows the number of assignments registered and the amount of tax collected for the past year, with similar figures for the previous year:—

NUMBER OF ASSIGNMENTS REGISTERED AND TAXES COLLECTED FOR THE FISCAL YEAR APRIL 1, 1949 TO MARCH 31, 1950, WITH COMPARATIVE FIGURES FOR THE FISCAL YEAR 1948-49

Kind of Lease or Permit	1949 - 1950		1948 - 1949	
	Number	Tax Collected	Number	Tax Collected
1. Agricultural leases .....	7	\$ 355.11	4	\$ 86.80
2. Grazing leases .....	150	8,450.71	189	19,888.07
3. School lands, cultivation and grazing leases .....	84	1,176.45	56	978.05
4. School land leases .....	14	157.60	15	109.42
5. School lands, miscellaneous sales and leases .....	7	10.80	2	7.00
6. School lands, cultivation permits .....	...	.....	1	.....
7. School lands, grazing permits .....	39	357.93	41	208.38
8. Public lands, cultivation and grazing leases .....	16	117.22	40	413.04
9. Public lands, grazing permits .....	23	551.73	34	170.92
10. Public lands, sales .....	5	58.81	2	90.12
11. Public lands, miscellaneous leases .....	5	427.15	11	98.45
12. Public lands, cultivation permits and leases .....	1	13.33	8	76.46
13. Sawmill site leases .....	...	.....	1	.....
14. Surface leases .....	...	.....	1	.....
15. Surface mineral rights and roads .....	...	.....	1	.....
16. License timber berths .....	13	4,335.33	10	.....
17. Special timber permits .....	...	.....	3	.....
18. Timber permit berths .....	4	157.06	13	64.60
19. Timber sales .....	3	.....	2	.....
20. Licenses of occupation .....	2	.....	1	.....
21. Damaged timber permit berths .....	...	.....	1	14.58
22. License timber sale .....	3	.....	...	.....
<b>TOTAL .....</b>	<b>376</b>	<b>\$16,769.23</b>	<b>436</b>	<b>\$22,205.89</b>

From the above it will be noticed that a smaller number of assignments were registered and less taxes collected. However, the reduced revenue can be attributed almost entirely to grazing leases, and to the fact that many of these had been transferred previously at a set minimum rate, and subsequently transferred at the same rate and no taxes collected. Many of them were transferred in conjunction with deeded lands and at values much less than those placed on the deeded lands. It is safe to say, that had we been able to assess the grazing leases without the hindrance of the minimum acreage rate, more than twice the revenue would have been collected than is shown in the above table.

### FILING

The past year has been a rather difficult one for the filing section, because of lack of help during the first part of the year, and lack of space afterwards. This was further aggravated by staff changes, through promotions and resignations, and an unusual amount of sickness.

Towards the end of the year, the division lost considerable floor space, which meant that in order to provide sufficient working space the contents of about 75 filing cabinets had to be placed on shelves in the basement vault. Thus it was

necessary to examine the files in 320 cabinets, remove any file that was temporarily inactive, and reshuffle the files into about 243 cabinets. As these files were not closed files, many trips have been made to the vaults throughout the day, resulting in a large amount of lost time.

The necessity of changing our land files from a numeric to a geographic filing system in line with the survey of the province, is becoming more evident each day. For example, when an inspection is called on one quarter-section, the files for the other three quarters have to be supplied, and in many cases, from three other cabinets in various parts of the room. In cases of this nature, the work and time involved is quadrupled. When a whole township is involved a great amount of time and energy is lost by our present system when compared to the geographic system.

A comparison of the new files opened for the past and previous years, is shown below, indicating an increase of about 17.3 per cent.

NEW FILES OPENED FOR THE YEARS 1948-49 AND 1949-50 WITH THE TOTAL NUMBER OF FILES AS AT MARCH 31, 1950

Kind of File	1948-49	1949-50	Total
General land .....	2,838	2,218	118,520
Land, personals .....	1,035	1,358	6,229
Grazing land .....	171	130	10,539
School land .....	408	428	14,420
Right of entry .....	55	85	325
Cabin .....	26	16	554
Road allowance .....	.....	532	532
Timber .....	553	443	11,718
Timber, personals .....	951	1,399	8,043
Timber sales .....	.....	473	473
<b>TOTAL .....</b>	<b>6,037</b>	<b>7,082</b>	<b>171,353</b>

It is a pleasure at this time to thank the staff for their co-operation and loyalty in carrying out their everyday duties, which at times have not been easy, in a spirit of cheerfulness and perseverance.







HD 319 A4 A329 16TH-19TH  
1945-1949  
ALBERTA DEPT OF LANDS AND  
MINES  
SERIAL MI 39794057 SCI



\*000036401610\*

Date Due

CIRC DEC 29 76	77 7 1 96	
NOV 22 RETURN	OCT 1 3	RETURN
► MAR 15 1978		
MAR 14 RETURN		
DUE CAM MAR 21 '80		
DUE CAM APR 15 '86		
DUE CAM MAY 12 '86		
MAY 12 RETURN		
DUE CAM OCT 02 1991		
DUE CAM NOV 13 1991		
DUE CAM FEB 24 '91		
JAN 03 RETURN		
DUE CAM FEB 14 1992		
DUE CAM MAR 28 1992		
DUE CAM MAY 09 1992		
DUE CAM JUN 17 1992		
JUN 30 RETURN		

*HD*

HD 319 A4 A329  
16th-19th 1945/46- 1948/49  
Alberta. Dept. of Lands and  
Mines. 39794057 SCI

1945/46

1948/49

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